

FIG. 1

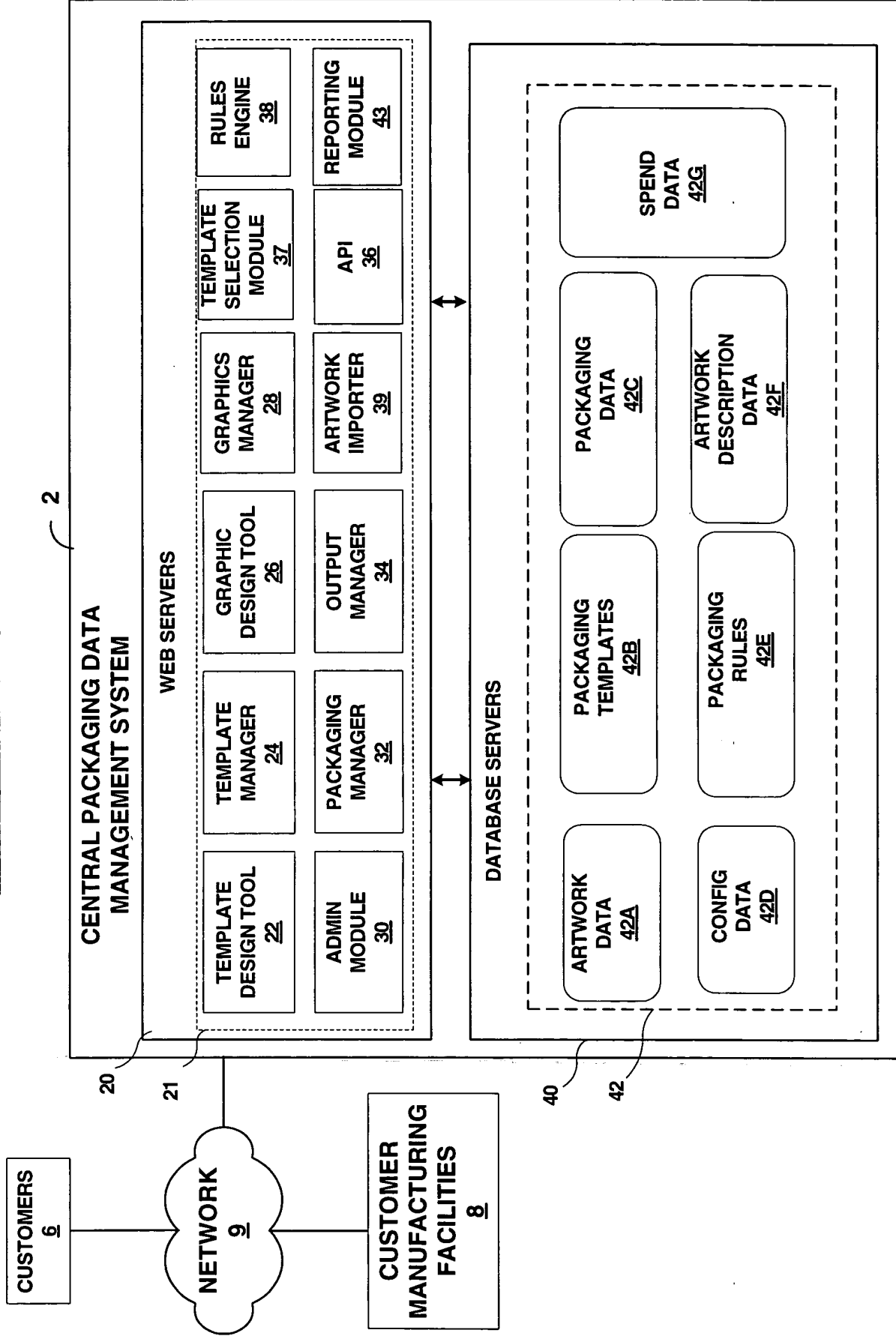


FIG. 2

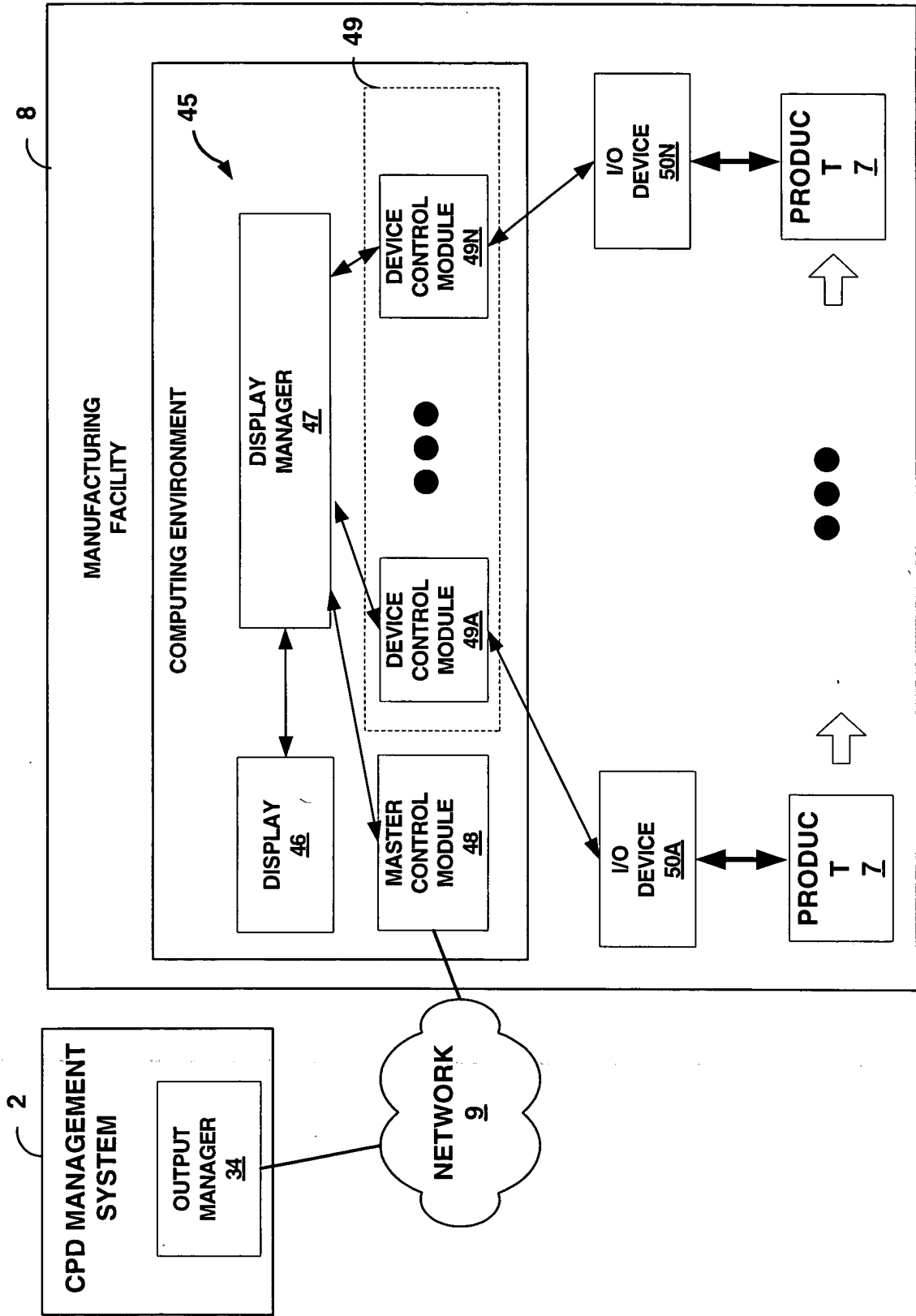


FIG. 3

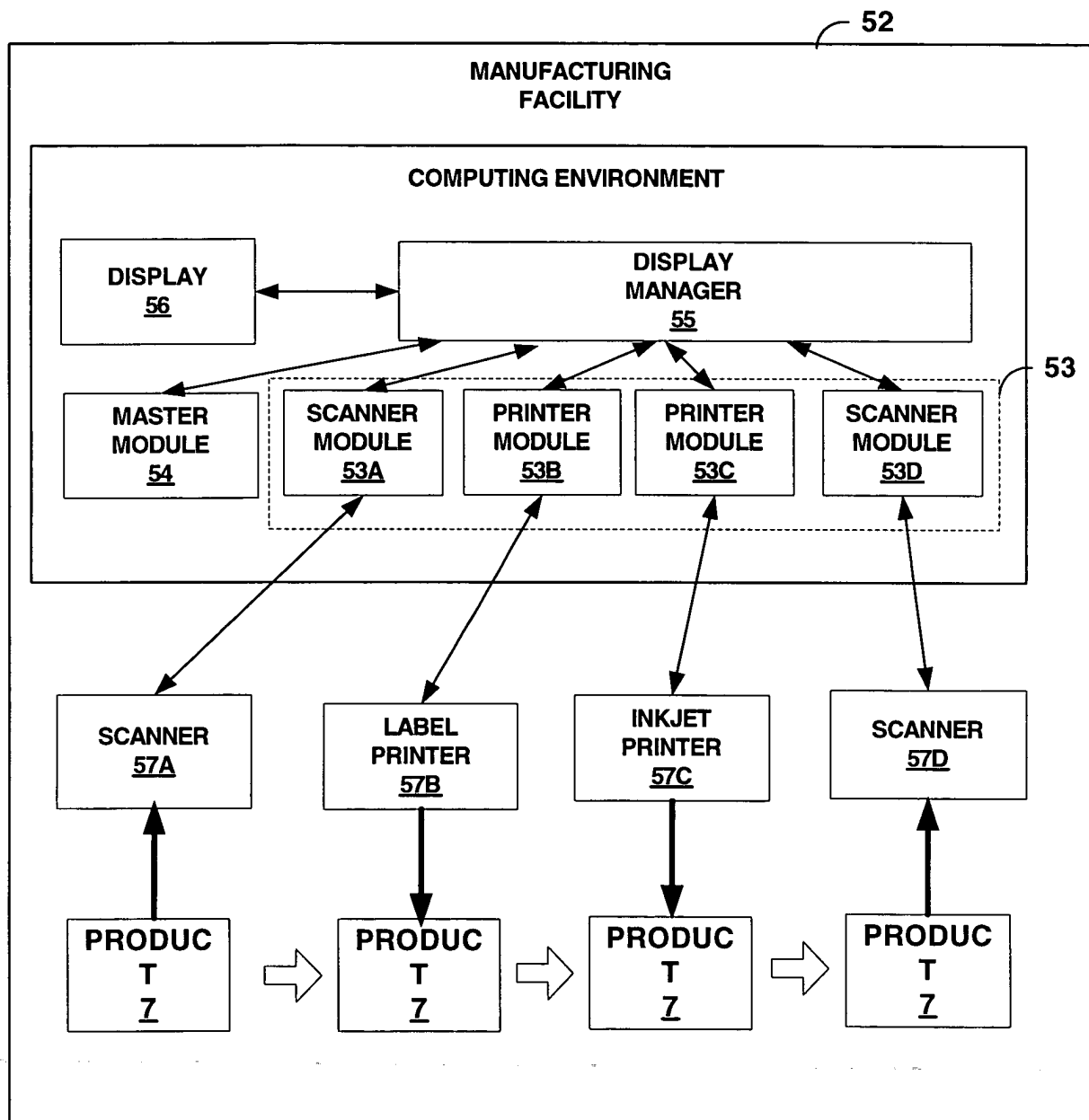


FIG. 4

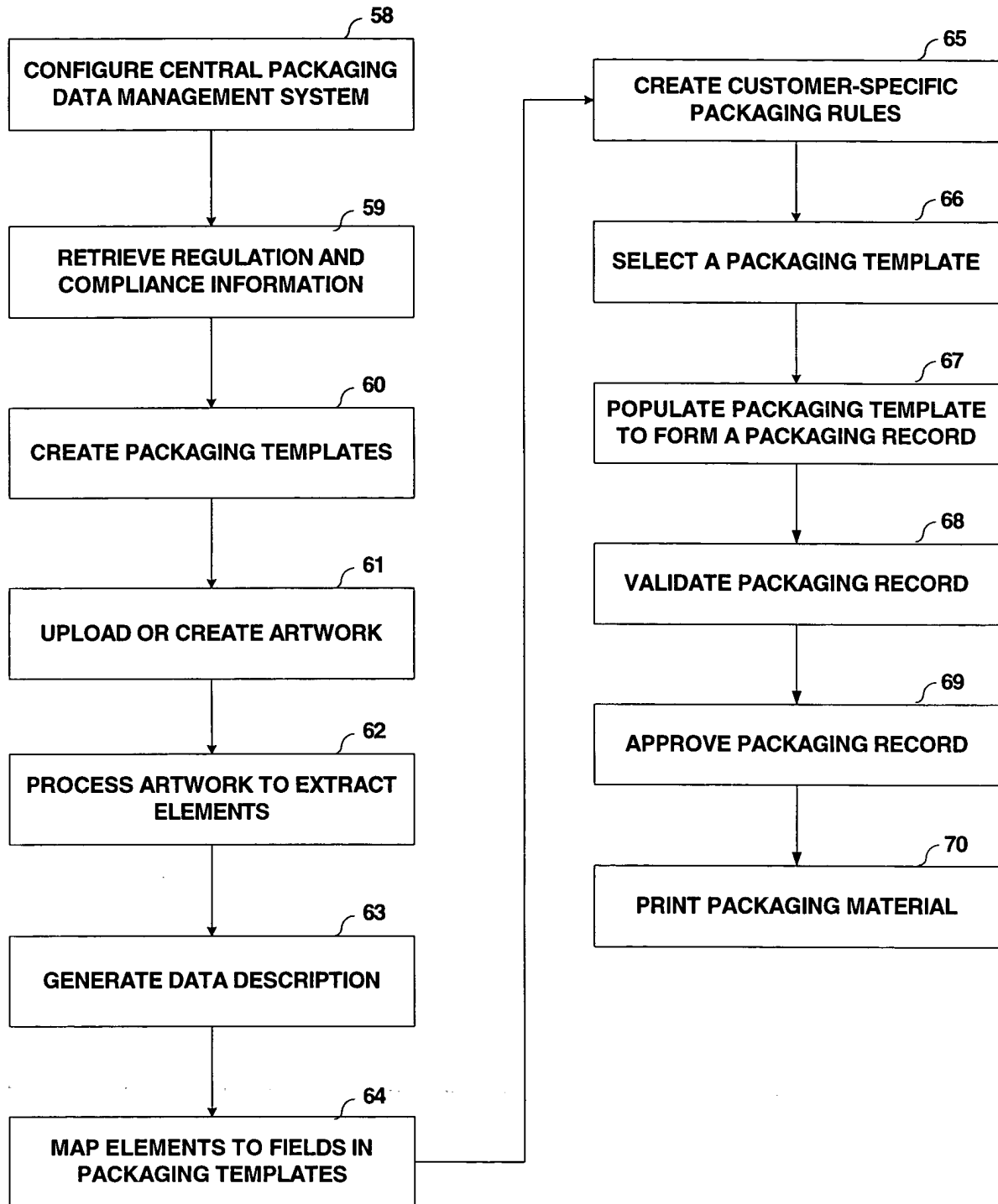


FIG. 5

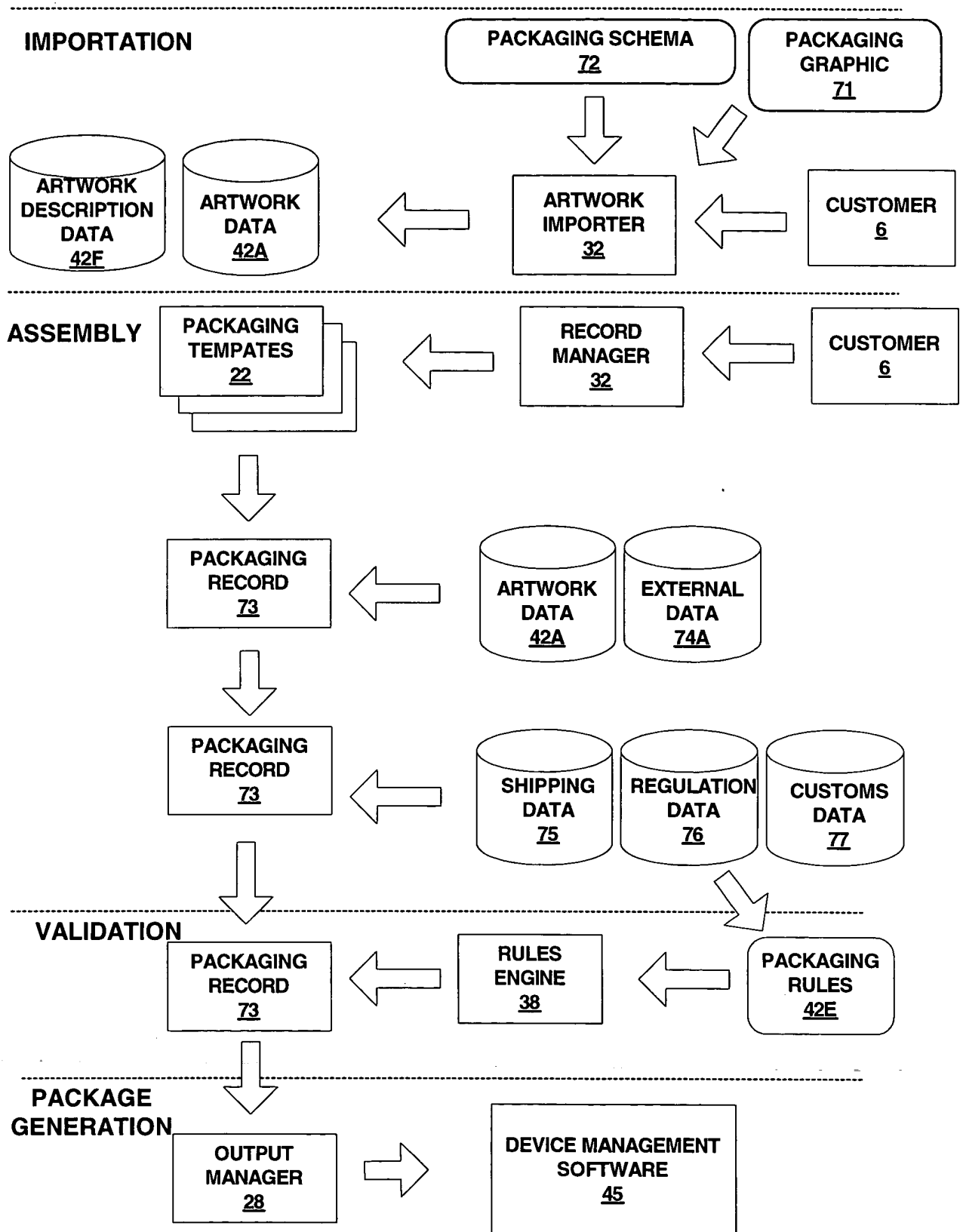


FIG. 6

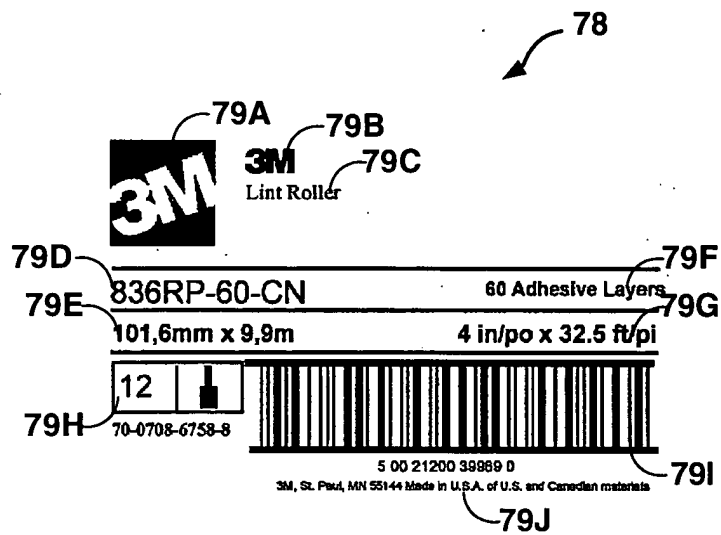


FIG. 7

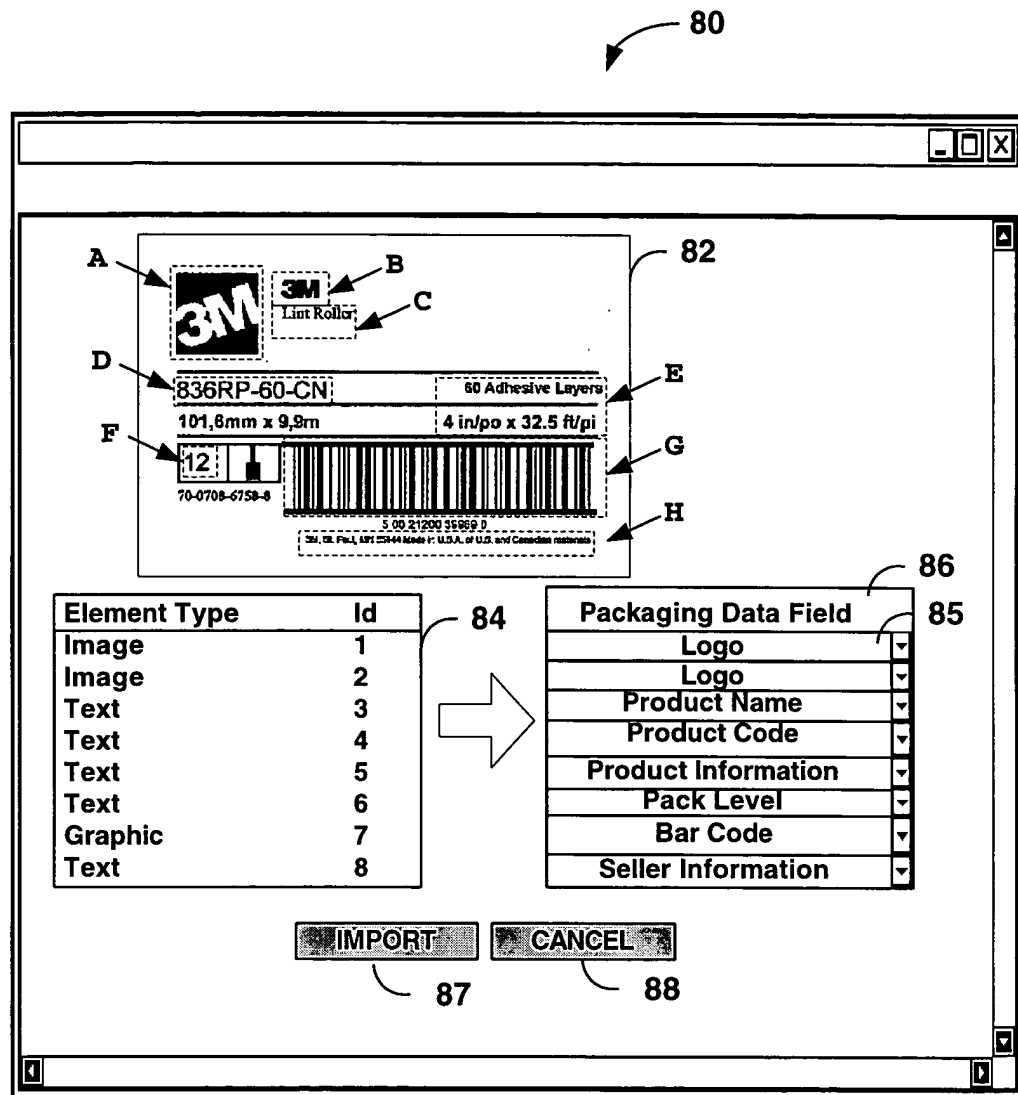


FIG. 8

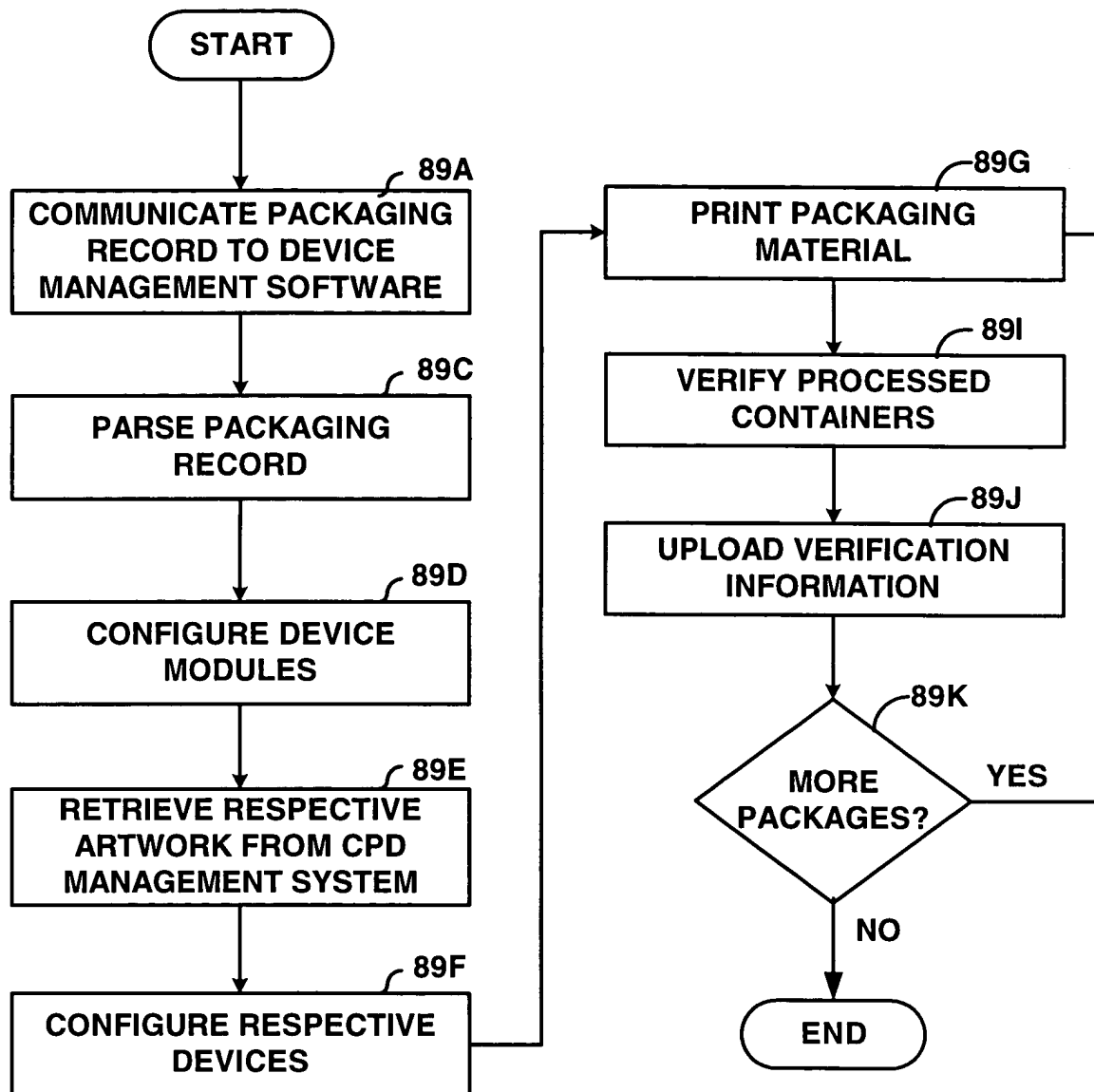


FIG. 9

TEMPLATE MANAGER

Central Labeling Database Template Management

3M Package Engineering

Central Labeling Database

91A

91B

91C

91D

91E

91F

91G

91H

91I

91J

91K

91L

91M

91N

91O

91P

91Q

91R

91S

91T

91U

91V

91W

91X

91Y

91Z

TEMPLATE MANAGEMENT

Add

Approve

Change

Save

Search

Global

PackLevel

Market

Business Units

Enter Template ID

Search

Display

91A

91B

91C

91D

91E

91F

91G

91H

91I

91J

91K

91L

91M

91N

91O

91P

91Q

91R

91S

91T

91U

91V

91W

91X

91Y

91Z

Template ID

12345678

Global

Pack Levels

1

2

3

4

5

6

7

8

9

Date of Entry

Date of Approval

Suggested Print Material

Polyester

5x7

Description

Name

Label Name

Business Units

Data Storage Division

Trustee

Collin Houghton

Supersedes

Old Label

Attach File

Label.lbl

Browse

Search Results

Enter Template ID

Search

Display

FIG. 10

GRAPHICS MANAGER

93

Central Labeling Database Graphics Management

3M Package Engineering Central Labeling Database

CLD Graphics Management System

Control Panel

94 Add 99 Approve Change Save Cancel

Graphic Data

100

Status Date of Entry Date Approved Trustee Superseded by

Unique Graphic ID Name

1234 Corporate Logo

96 Description

Flying Wings Corporate Logo

Categories

☐ Pack Level ☐ Logo ☐ Symbol

Source Path And Filename

97 J:\Logos\flyingswings.jpg

Browse

Search

95 Enter a graphic name:

Search Clear Results

Results

Name	Id Number	Status
VIEW		

Graphics Viewer

98

FIG. 11

PACKAGING
MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

Functions

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

CLD Key Fields

3M ID: 70-0160-8829-1

Label/Pack Level: [5] Shipper

Status: Approved

Unique Label ID: 38-7000-0028-4

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

108A

Power Brand Name

Product Description

Notes

Generic Name

Cat Number

653AU

Business Unit

Expiration Days Offset

0

TradeMark Names

#1

#2

#3

#4

#5

#6

Main Product Data

Origin / Addresses Data

Free Text Data

110A

110B

110C

FIG. 12

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

New Record

Query Record

Change Record

Save Changes

3M ID

Unique Label ID

Approve Pending

Cancel

Look Up Options

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

(6) Shipper

Unique Label ID

38-7000-0028-4

Part

Status

Approved

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

Country Of Origin

Country Of Origin

Made in the U.S.A.

Made In Translations

#1 French

#2 Latin American Spanish

#3

#4

#5

#6

Addresses

#1 3M St Paul

#2

#3

#4

#5

#6

Main Product Data

Origin / Addresses Data

Free Text Data

Main Menu

Need Help?

FIG. 13

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

(6) Shipper

Part

38-7000-0028-4

Status

Approved

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Translations

Product

Pack Level

Template/Part

Graphics

1

2

3

4

5

6

7

8

9

Billing Unit

122

120

124

Quantity

15

Imperial Dimensions

1.5 in/po x 2 in/po

Metric Dimensions

38.1 mm x 50.8 mm

Imperial Weight

Metric Weight

Barcode Symbolology

Interleaved 2of5

Barcode Content

5002120071965

PACK OUTLINE SUMMARY:

12

3

36

124

(3) Intermediate Pack-1

(6) Shipper

Billing Unit

FIG. 14

PACKAGING
MANAGER

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

Functions

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

108C

CLD Key Fields

3M ID

70-0160-6829-1

Label/Pack Level

[6] Shipper

Part

Approved

Status

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

Template Key Data

Pack Level

[6] Shipper

Part

Approved

Status

Template Lookup

☒ Non Business Unit

☐ Non Market

☒ [6] Shipper

Templates

Post It Shipper

126

View Label

128

Scotchgard™

3M™

hkl

Griffin Corporation

23245

3in X 3in

12

12

70-0061-7733-4

FIG. 15

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Functions

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

108D

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

(6) Shipper

Part

Approved

Status

Unique Label ID

38-7000-0028-4

Non Pass Through Product

Product

Pack Level

Template/Part

Graphics

Translations

Label Graphic Symbols

134

Pack Level

(6) Shipper

Part

Add

Change

Delete

Field Name

Category

Choice

Graphic Field 1

Logo

3M Super Logo graphic

Graphic Field 2

Logo

Post It Logo

132

FIG. 16

First Named Inventor: Mary K. Kroening
Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING
MANAGER

101

Central Labeling Database Record Management

3M Package Engineering

Central Labeling Database

Main Menu

Need Help?

Functions

New Record

Query Record

Change Record

Save Changes

Cancel

Approve Pending

Lookup Options

☒ 3M ID

☐ Unique Label ID

CLD Key Fields

3M ID

70-0160-6829-1

Label Pack Level

[6] Shipper

Part

Approved

Status

Unique Label ID

38-7000-0028-4

Non Pass Through Product

108E

Product

Pack Level

Template/Part

Graphics

Translations

Product Description Translations

136

Pack Level

[6] Shipper

Part

Add

Change

Delete

Language

French

Latin Americ...

Translation Text

Feuilles

Notes

Product Description

Notes

FIG. 17

OUTPUT
MANAGER

140

Central Labeling Database Output Module

3M Package Engineering

Central Labeling Database

Print Labels

View Approved Labels

CLD Help

Label Search

Data Source

☐ Local Data Source ☒ Central Data Source

Search By:

☒ 3M ID Number ☐ Unique Label ID

3M ID:

70-0160-3745-2

Pack Level

(6) Shipper

Part

Look Up

FIG. 18

First Named Inventor: Mary K. Kroening
Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

OUTPUT
MANAGER

140

Central Labeling Database Output Module

3M Package Engineering

Central Labeling Database

Print Labels

View Approved Labels

CLD Help

Label Search

Data Source

☐ Local Data Source

☒ Central Data Source

Search By:

☒ 3M ID Number

☐ Unique Label ID

3M ID: 70-0160-4442-5

Pack Level: [6] Shipper

Part: [38700000235]

Look Up

Label Detail Data

Product Description

Notes

Imperial Dimensions

1.5 in/po x 2 in/po

Metric Dimensions

38.1 mm x 50.8 mm

Imperial Weight

653RP

Metric Weight

5002120000339

Template Name

Post It Shipper

Suggested Label Stock

Barcode Content

5002120000339

Calculated Expiration Date

No Offset Specified

Variable Run-Time Data

Lot Number

Batch Code

Quantity

Available Printers

148

150

152

Pkg-HP4050-224-1e

Print

FIG. 19

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

OUTPUT MANAGER

140

Central Labeling Database Output Module

3M Package Engineering

Central Labeling Database

154

Print Labels

View Approved Labels

CLD Help

Approved Label Lookup

3M ID Number
70-0160-3745-2

Pack Level
(6) Shipper

Part
.

Look Up

156

Label ID	Label Description	Label Type	Label Status
70-0160-3745-2	Shipper Label	Standard	Approved
70-0160-3745-3	Shipper Label	Standard	Approved
70-0160-3745-4	Shipper Label	Standard	Approved
70-0160-3745-5	Shipper Label	Standard	Approved
70-0160-3745-6	Shipper Label	Standard	Approved
70-0160-3745-7	Shipper Label	Standard	Approved
70-0160-3745-8	Shipper Label	Standard	Approved
70-0160-3745-9	Shipper Label	Standard	Approved
70-0160-3745-10	Shipper Label	Standard	Approved
70-0160-3745-11	Shipper Label	Standard	Approved
70-0160-3745-12	Shipper Label	Standard	Approved
70-0160-3745-13	Shipper Label	Standard	Approved
70-0160-3745-14	Shipper Label	Standard	Approved
70-0160-3745-15	Shipper Label	Standard	Approved
70-0160-3745-16	Shipper Label	Standard	Approved
70-0160-3745-17	Shipper Label	Standard	Approved
70-0160-3745-18	Shipper Label	Standard	Approved
70-0160-3745-19	Shipper Label	Standard	Approved
70-0160-3745-20	Shipper Label	Standard	Approved
70-0160-3745-21	Shipper Label	Standard	Approved
70-0160-3745-22	Shipper Label	Standard	Approved
70-0160-3745-23	Shipper Label	Standard	Approved
70-0160-3745-24	Shipper Label	Standard	Approved
70-0160-3745-25	Shipper Label	Standard	Approved
70-0160-3745-26	Shipper Label	Standard	Approved
70-0160-3745-27	Shipper Label	Standard	Approved
70-0160-3745-28	Shipper Label	Standard	Approved
70-0160-3745-29	Shipper Label	Standard	Approved
70-0160-3745-30	Shipper Label	Standard	Approved
70-0160-3745-31	Shipper Label	Standard	Approved
70-0160-3745-32	Shipper Label	Standard	Approved
70-0160-3745-33	Shipper Label	Standard	Approved
70-0160-3745-34	Shipper Label	Standard	Approved
70-0160-3745-35	Shipper Label	Standard	Approved
70-0160-3745-36	Shipper Label	Standard	Approved
70-0160-3745-37	Shipper Label	Standard	Approved
70-0160-3745-38	Shipper Label	Standard	Approved
70-0160-3745-39	Shipper Label	Standard	Approved
70-0160-3745-40	Shipper Label	Standard	Approved
70-0160-3745-41	Shipper Label	Standard	Approved
70-0160-3745-42	Shipper Label	Standard	Approved
70-0160-3745-43	Shipper Label	Standard	Approved
70-0160-3745-44	Shipper Label	Standard	Approved
70-0160-3745-45	Shipper Label	Standard	Approved
70-0160-3745-46	Shipper Label	Standard	Approved
70-0160-3745-47	Shipper Label	Standard	Approved
70-0160-3745-48	Shipper Label	Standard	Approved
70-0160-3745-49	Shipper Label	Standard	Approved
70-0160-3745-50	Shipper Label	Standard	Approved
70-0160-3745-51	Shipper Label	Standard	Approved
70-0160-3745-52	Shipper Label	Standard	Approved
70-0160-3745-53	Shipper Label	Standard	Approved
70-0160-3745-54	Shipper Label	Standard	Approved
70-0160-3745-55	Shipper Label	Standard	Approved
70-0160-3745-56	Shipper Label	Standard	Approved
70-0160-3745-57	Shipper Label	Standard	Approved
70-0160-3745-58	Shipper Label	Standard	Approved
70-0160-3745-59	Shipper Label	Standard	Approved
70-0160-3745-60	Shipper Label	Standard	Approved
70-0160-3745-61	Shipper Label	Standard	Approved
70-0160-3745-62	Shipper Label	Standard	Approved
70-0160-3745-63	Shipper Label	Standard	Approved
70-0160-3745-64	Shipper Label	Standard	Approved
70-0160-3745-65	Shipper Label	Standard	Approved
70-0160-3745-66	Shipper Label	Standard	Approved
70-0160-3745-67	Shipper Label	Standard	Approved
70-0160-3745-68	Shipper Label	Standard	Approved
70-0160-3745-69	Shipper Label	Standard	Approved
70-0160-3745-70	Shipper Label	Standard	Approved
70-0160-3745-71	Shipper Label	Standard	Approved
70-0160-3745-72	Shipper Label	Standard	Approved
70-0160-3745-73	Shipper Label	Standard	Approved
70-0160-3745-74	Shipper Label	Standard	Approved
70-0160-3745-75	Shipper Label	Standard	Approved
70-0160-3745-76	Shipper Label	Standard	Approved
70-0160-3745-77	Shipper Label	Standard	Approved
70-0160-3745-78	Shipper Label	Standard	Approved
70-0160-3745-79	Shipper Label	Standard	Approved
70-0160-3745-80	Shipper Label	Standard	Approved
70-0160-3745-81	Shipper Label	Standard	Approved
70-0160-3745-82	Shipper Label	Standard	Approved
70-0160-3745-83	Shipper Label	Standard	Approved
70-0160-3745-84	Shipper Label	Standard	Approved
70-0160-3745-85	Shipper Label	Standard	Approved
70-0160-3745-86	Shipper Label	Standard	Approved
70-0160-3745-87	Shipper Label	Standard	Approved
70-0160-3745-88	Shipper Label	Standard	Approved
70-0160-3745-89	Shipper Label	Standard	Approved
70-0160-3745-90	Shipper Label	Standard	Approved
70-0160-3745-91	Shipper Label	Standard	Approved
70-0160-3745-92	Shipper Label	Standard	Approved
70-0160-3745-93	Shipper Label	Standard	Approved
70-0160-3745-94	Shipper Label	Standard	Approved
70-0160-3745-95	Shipper Label	Standard	Approved
70-0160-3745-96	Shipper Label	Standard	Approved
70-0160-3745-97	Shipper Label	Standard	Approved
70-0160-3745-98	Shipper Label	Standard	Approved
70-0160-3745-99	Shipper Label	Standard	Approved
70-0160-3745-100	Shipper Label	Standard	Approved

FIG. 20

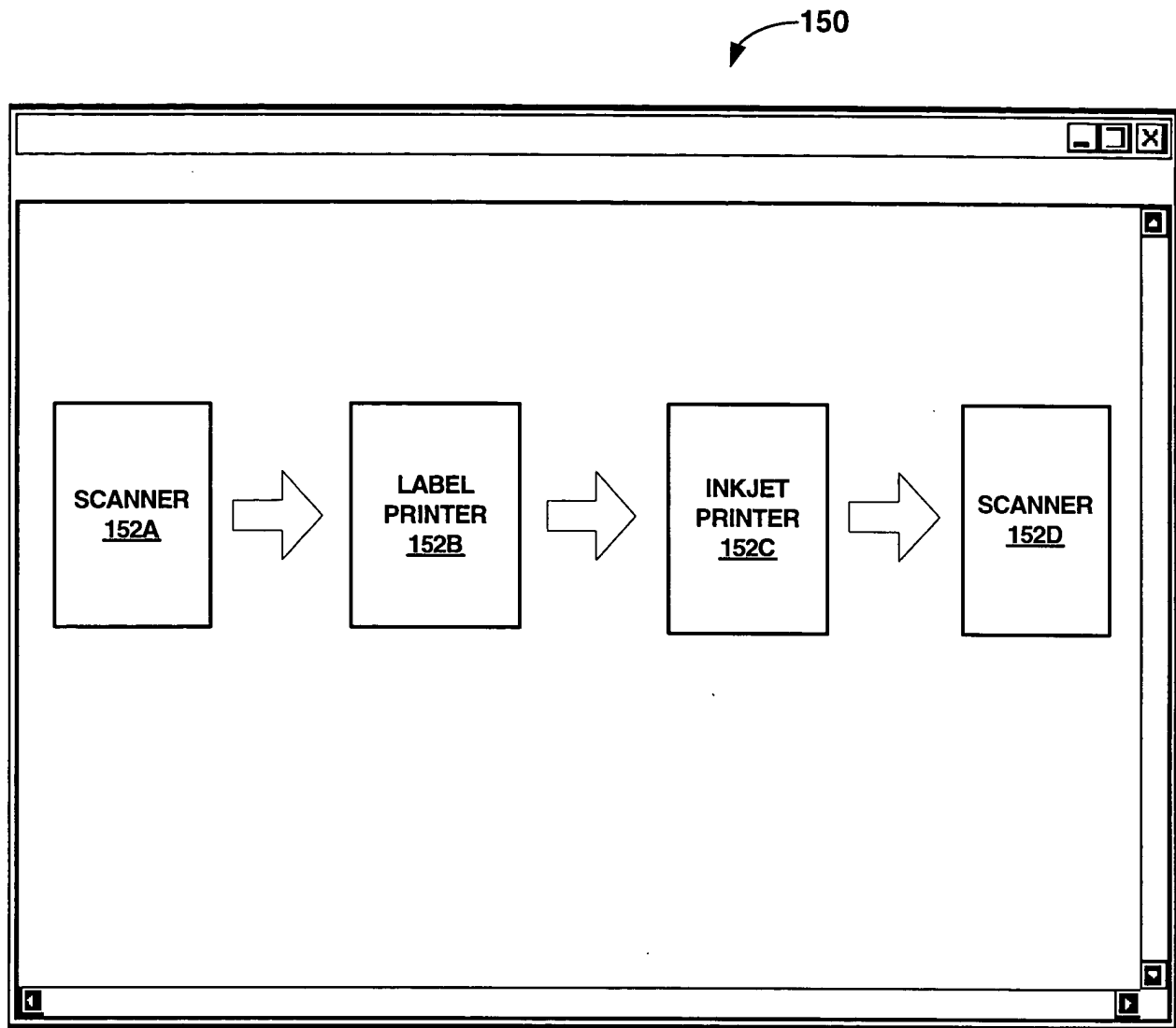


FIG. 21

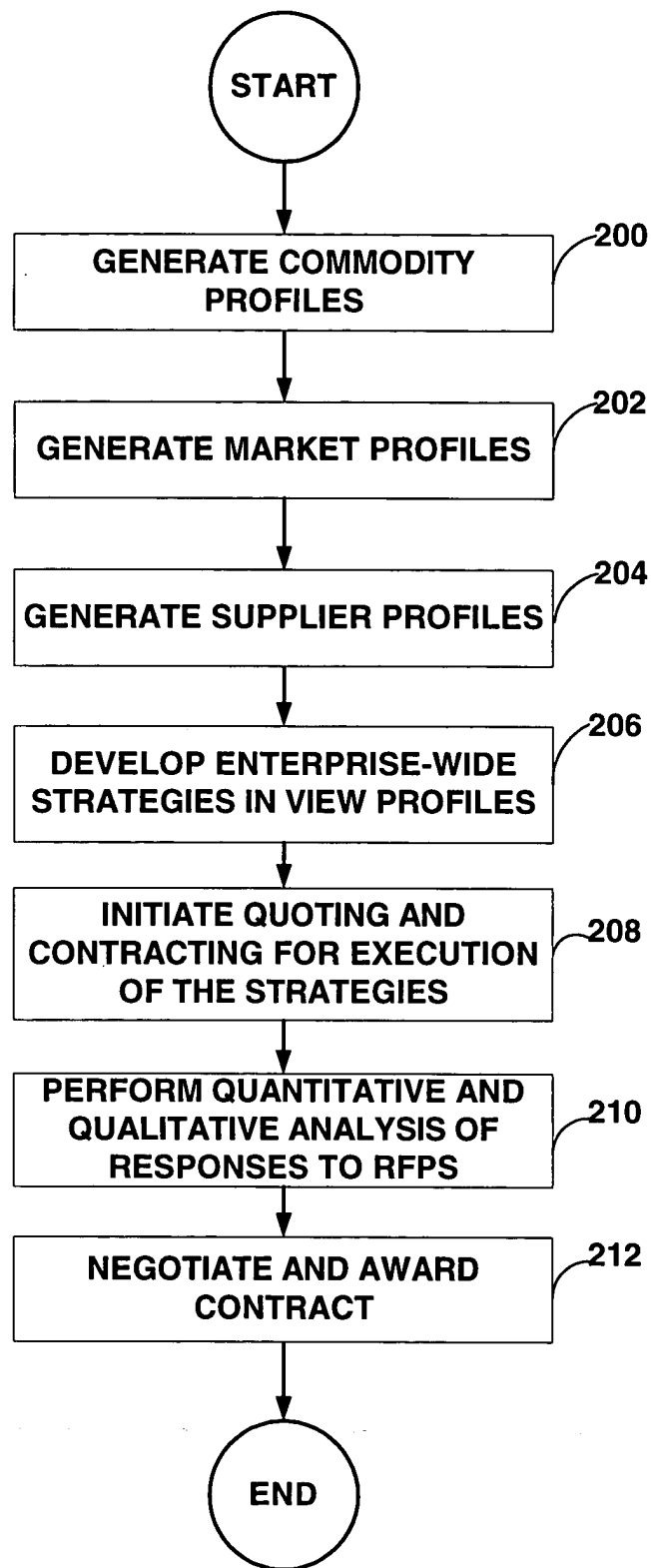


FIG. 22

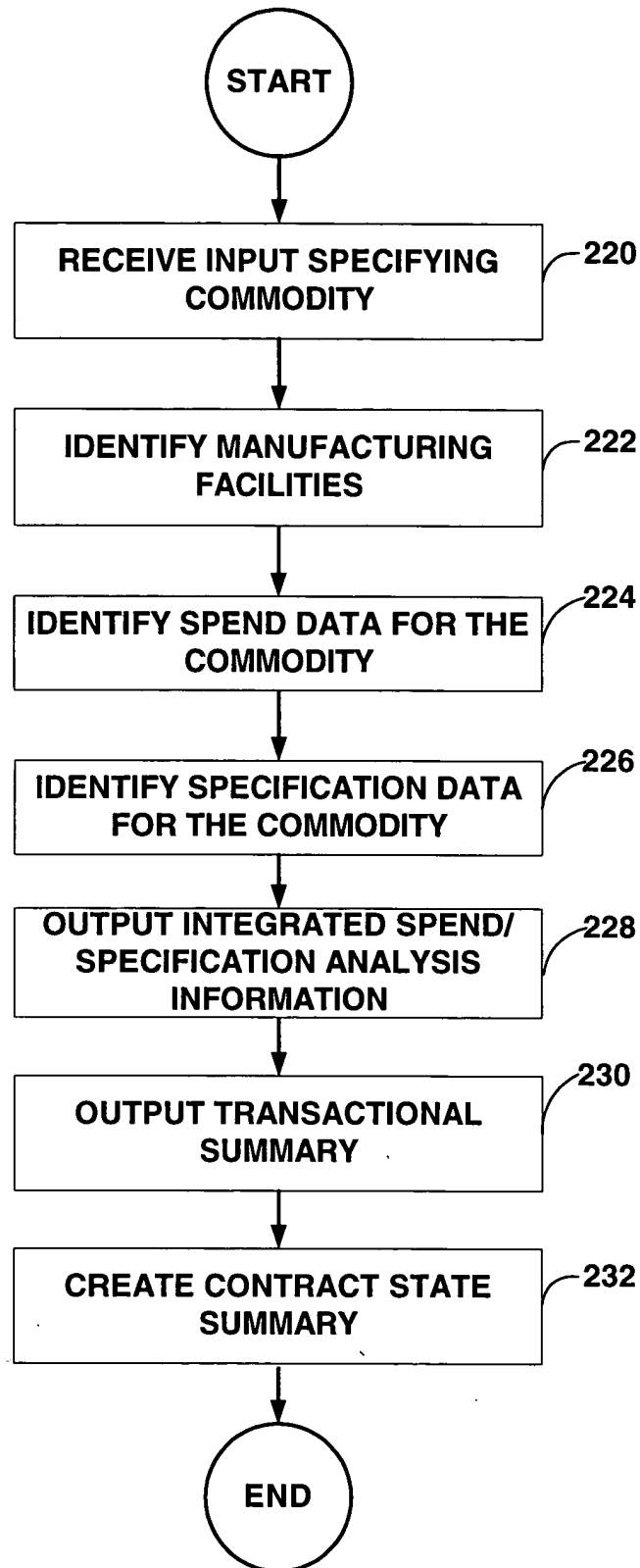


FIG. 23

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

240

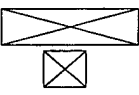

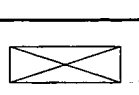

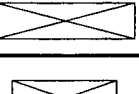
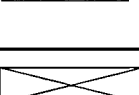
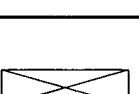
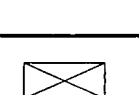

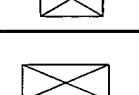
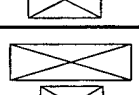
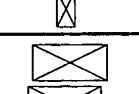
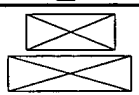
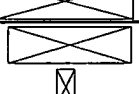
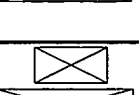
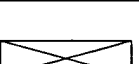
Specification Data										Purchase Order History Data									
										Plant B									
300069	RSC	13.81	5.87	6.81	ECT 26	Kraft	C Flute	1 color	t1234	280,000	0.25	\$70,000	1111			Supplier 1			
300070	Die Cut	7	7	8	200#	Bleached White	B Flute	No Print	t1235	320,000	0.80	\$256,000	2222			Supplier 2			
300071	FOL	13.4	10	13.75	ECT 32	Kraft	C Flute	2 color	t1236	5000	2.08	\$10,400	3333			Supplier 3			
300073	RSC	10	10	10	200#	Kraft	C Flute	1 color	t1237	11,000	0.38	\$4,180	4444			Supplier 2			
300074	RSC	10	10	10	ECT 32	Kraft	E Flute	1 color	t1238	160,000	0.26	\$41,600	5555			Supplier 3			
300075	RSC	13.81	5.87	6.81	ECT 26	Kraft	E Flute	1 color	t1239	25,000	0.84	\$21,000	6666			Supplier 2			
300076	Die Cut	13.4	10	13.75	150#	Mottle White	C Flute	1 color	t1240	500,000	0.15	\$75,000	7777			Supplier 3			
300077	RSC	12	12	12	ECT 26	Bleached White	C Flute	1 color	t1241	85,000	0.50	\$42,500	8888			Supplier 1			
300078	Die Cut	13.4	10	13.75	ECT 26	Bleached White	E Flute	2 color	t1242	7000	1.65	\$11,550	1234			Supplier 1			
300079	RSC	13.81	5.87	6.81	ECT 32	Mottle White	B Flute	No Print	t1243	38,000	0.85	\$32,300	2345			Supplier 3			
300080	RSC	23.75	5.5	23.12	150#	Kraft	C Flute	No Print	t1244	3000	0.88	\$2,640	3456			Supplier 2			
300081	RSC	13.81	5.87	6.81	150#	Kraft	C Flute	2 color	t1245	5000	1.39	\$6,950	4567			Supplier 3			
300082	Die Cut	7	7	8	ECT 26	Mottle White	E Flute	1 color	t1246	135,000	0.28	\$37,800	5678			Supplier 1			
300083	RSC	13.81	5.87	6.81	ECT 32	Kraft	B Flute	1 color	t1247	30000	0.55	\$16,500	6789			Supplier 2			

FIG. 24

242

Sum of Total Invoice \$	Supplier			
Material	Supplier 1	Supplier 2	Supplier 3	Grand Total
Bleached White	\$54,050	\$256,000	\$126,000	\$436,050
Kraft	\$70,000	\$44,320	\$76,450	\$190,770
Mottle White	\$37,800	\$36,000	\$107,300	\$181,100
Grand Total	\$161,850	\$336,320	\$309,750	\$807,920

244

Sum of Total Invoice \$	Site Location			
Material	Plant A	Plant B	Plant C	Grand Total
Bleached White	\$256,000	\$11,550	\$168,500	\$436,050
Kraft	\$44,400	\$142,190	\$4,180	\$190,770
Mottle White	\$37,800	\$32,300	\$111,000	\$181,100
Grand Total	\$338,200	\$186,040	\$283,680	\$807,920

FIG. 25

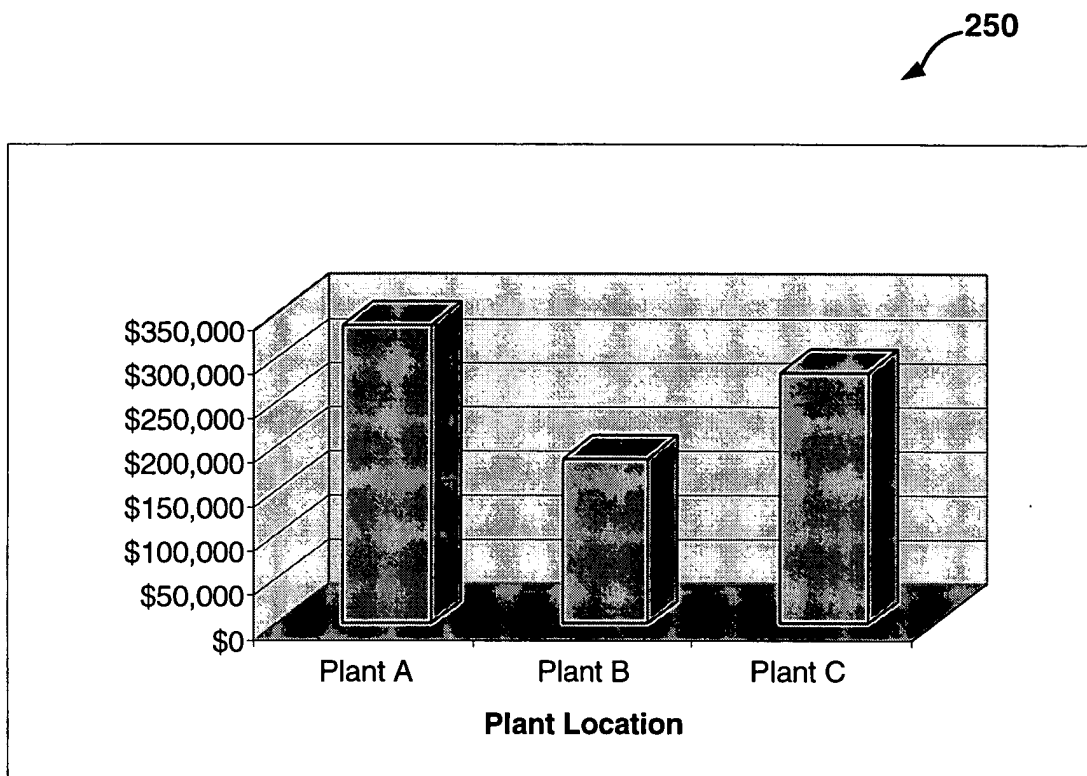


FIG. 26

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

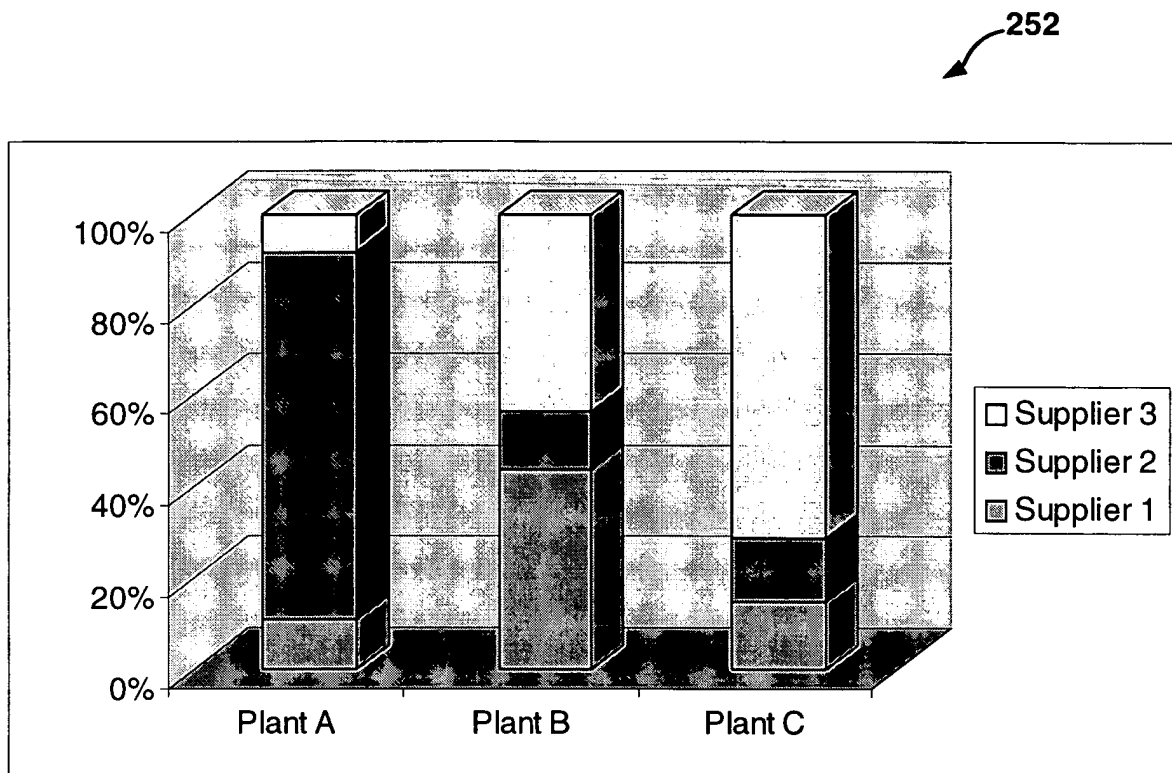


FIG. 27

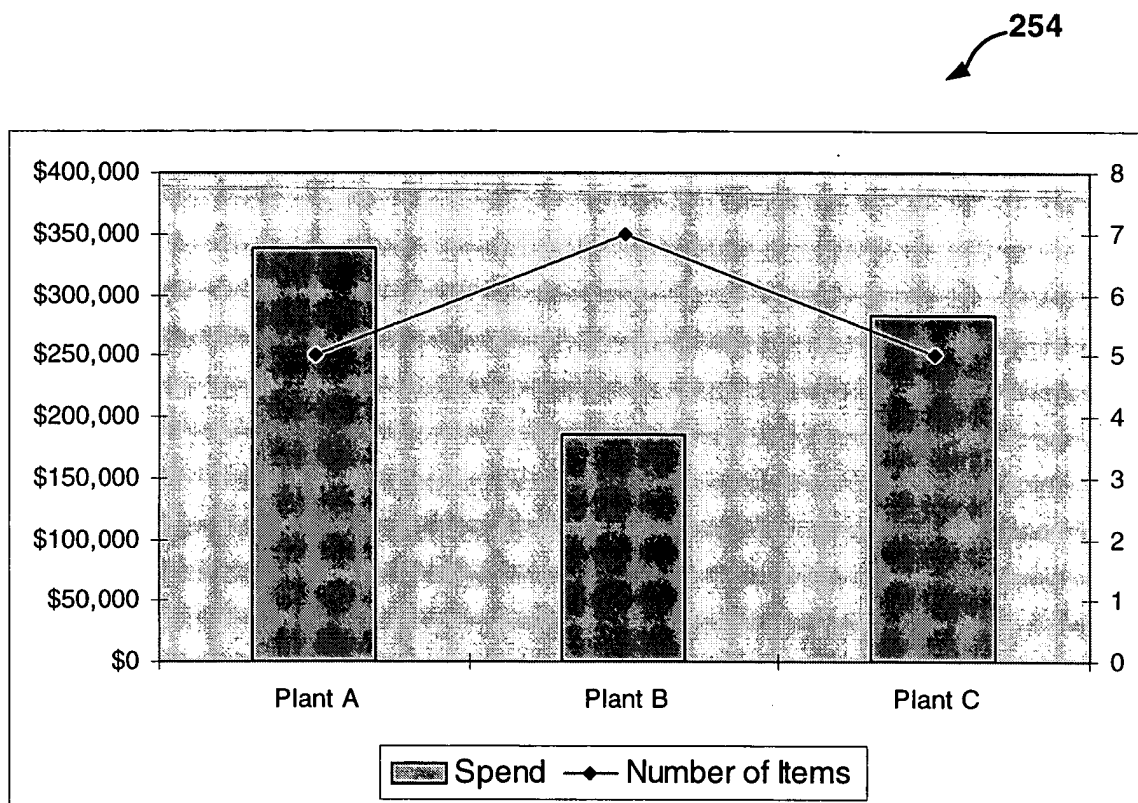


FIG. 28

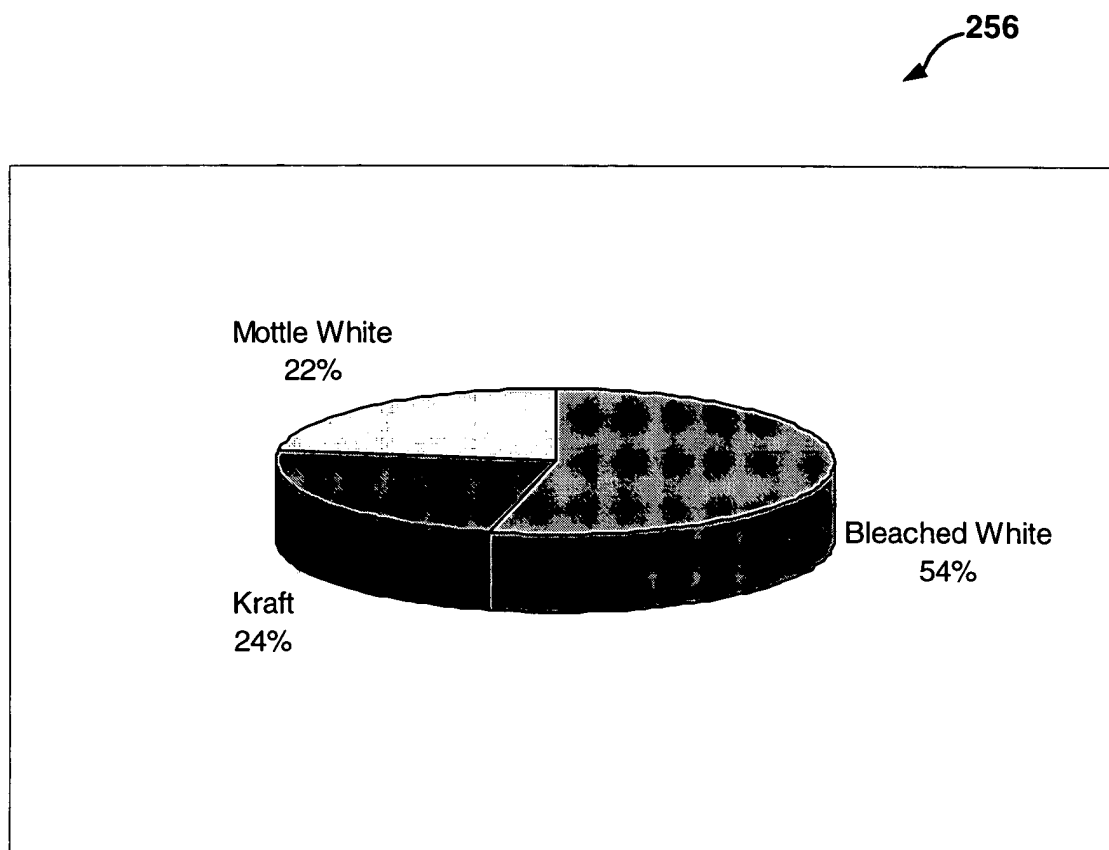


FIG. 29

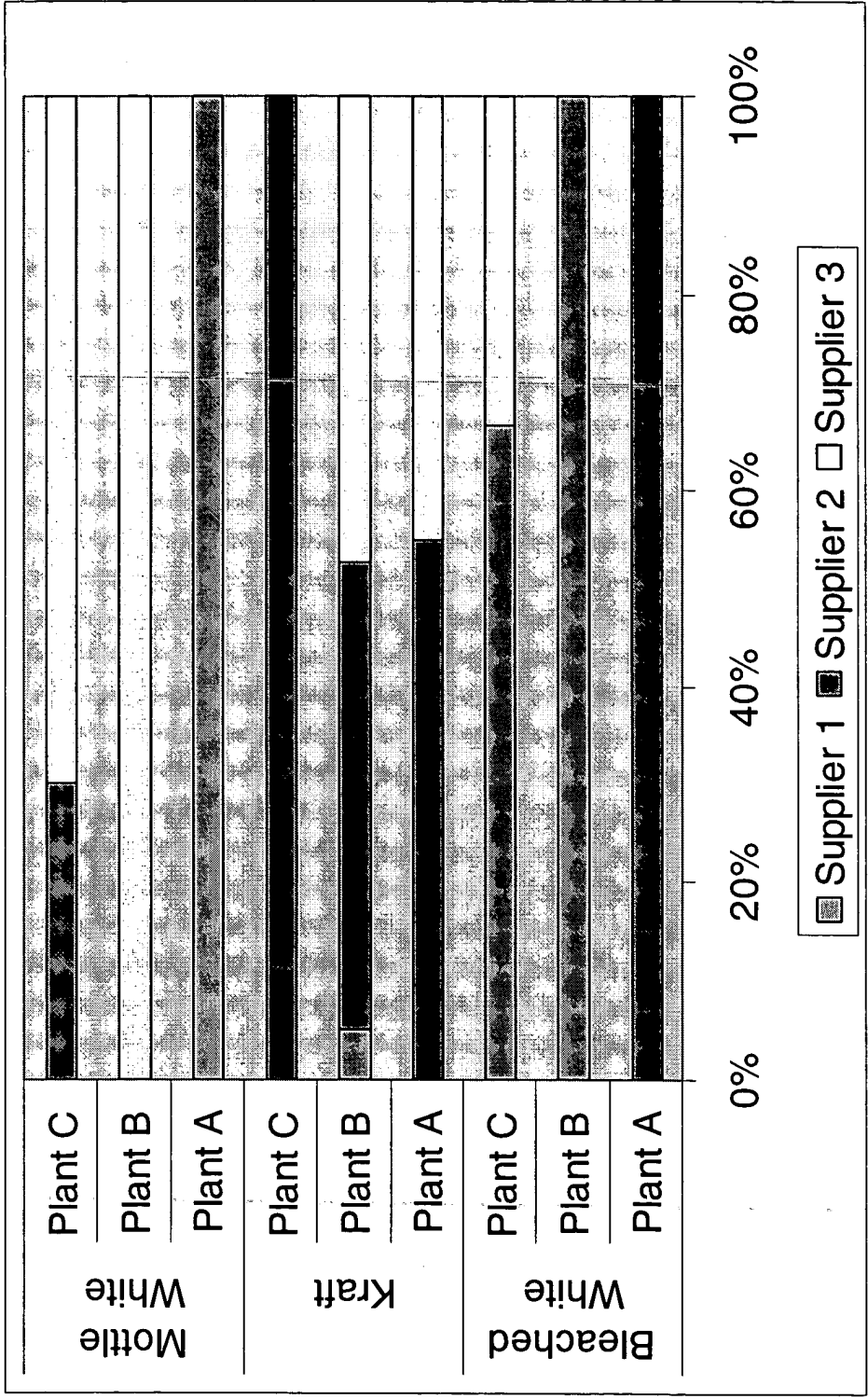


FIG. 30

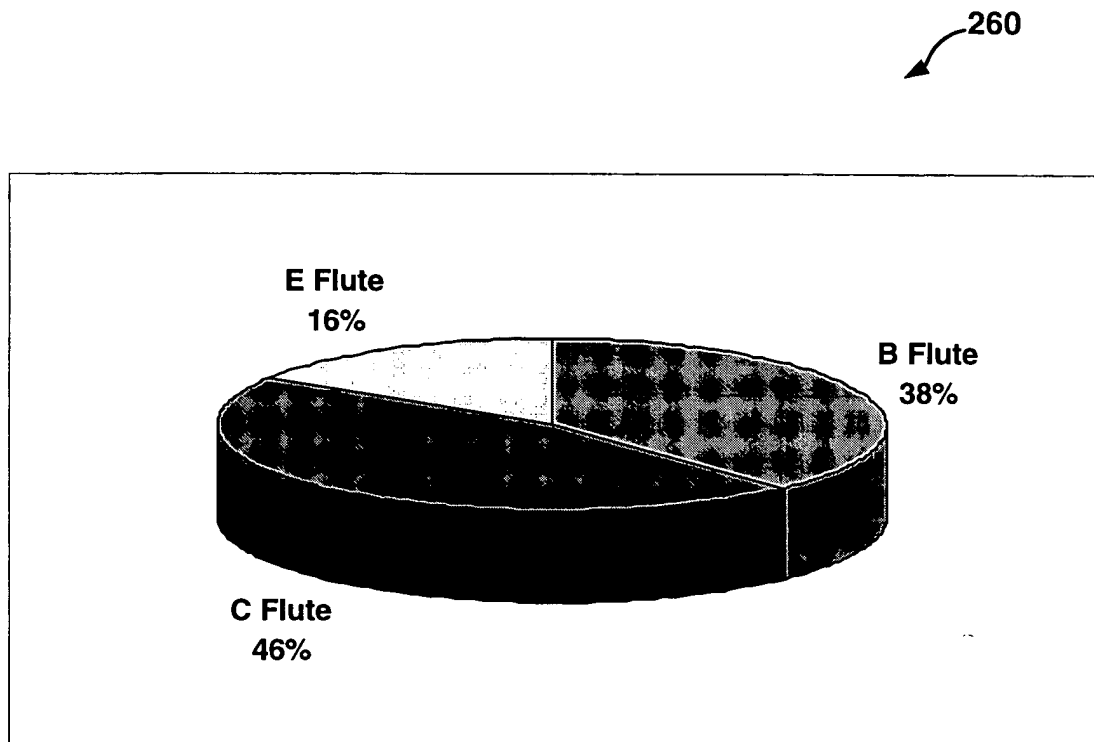


FIG. 31

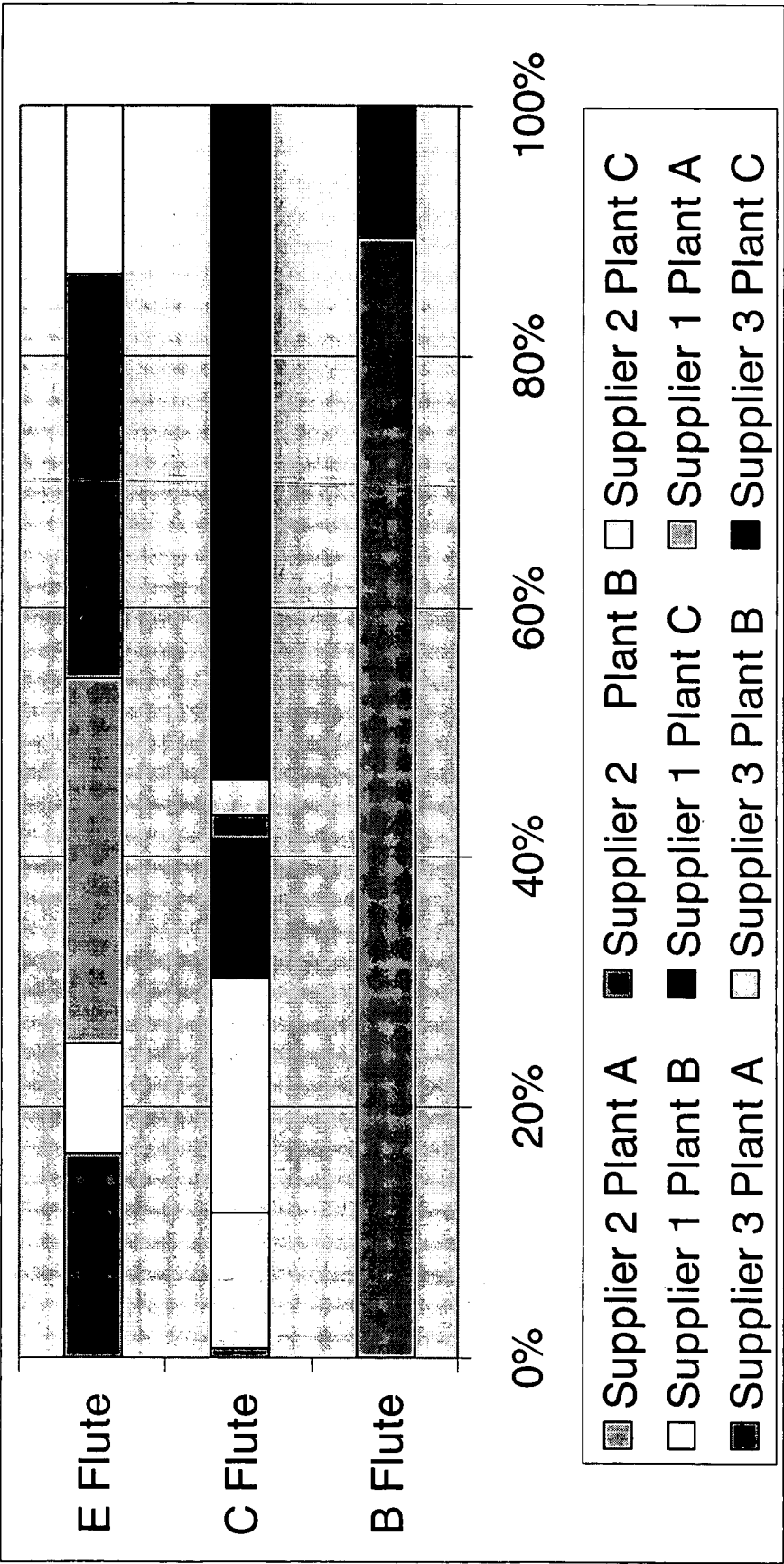


FIG. 32

264

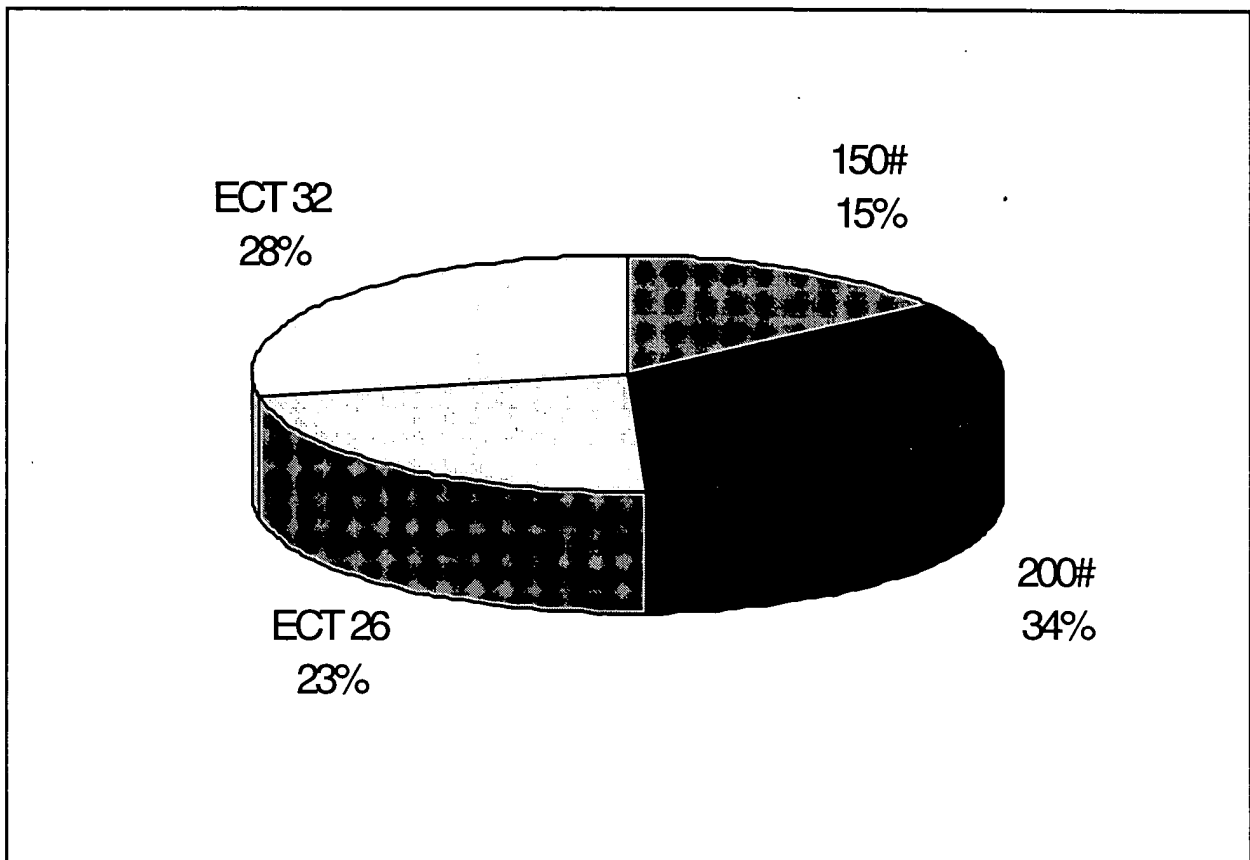


FIG. 33

266

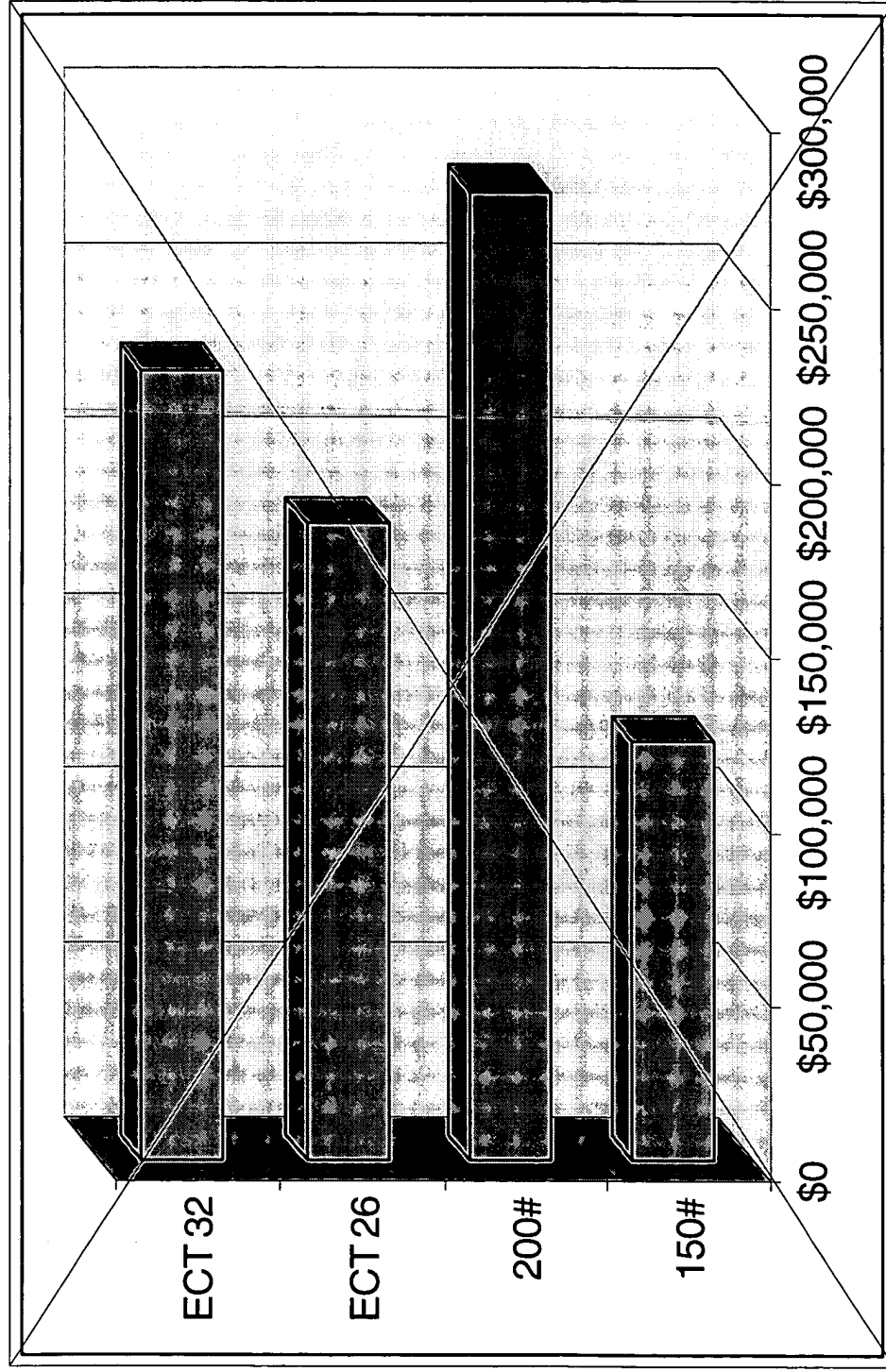


FIG. 34

268

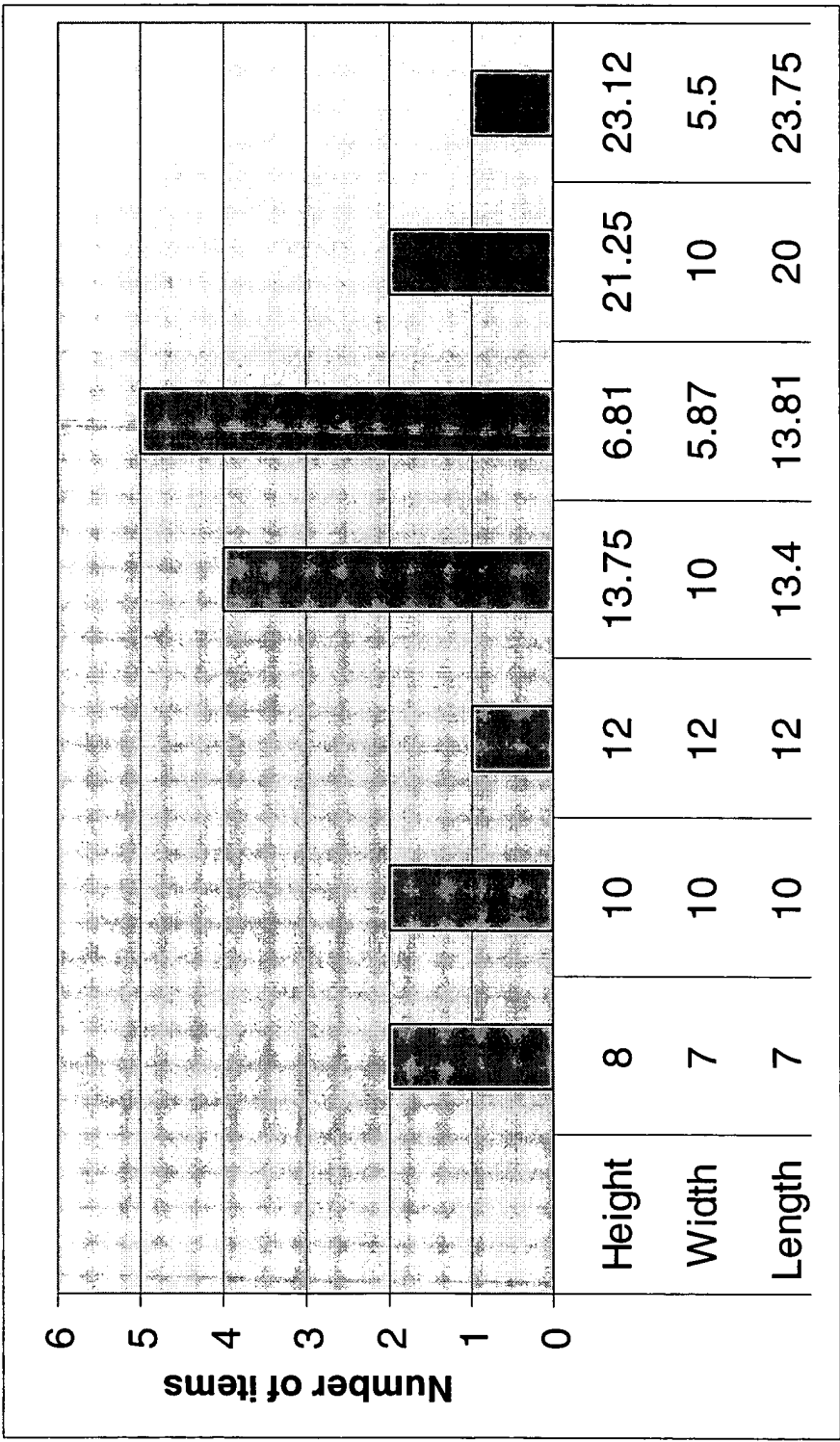


FIG. 35

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

270

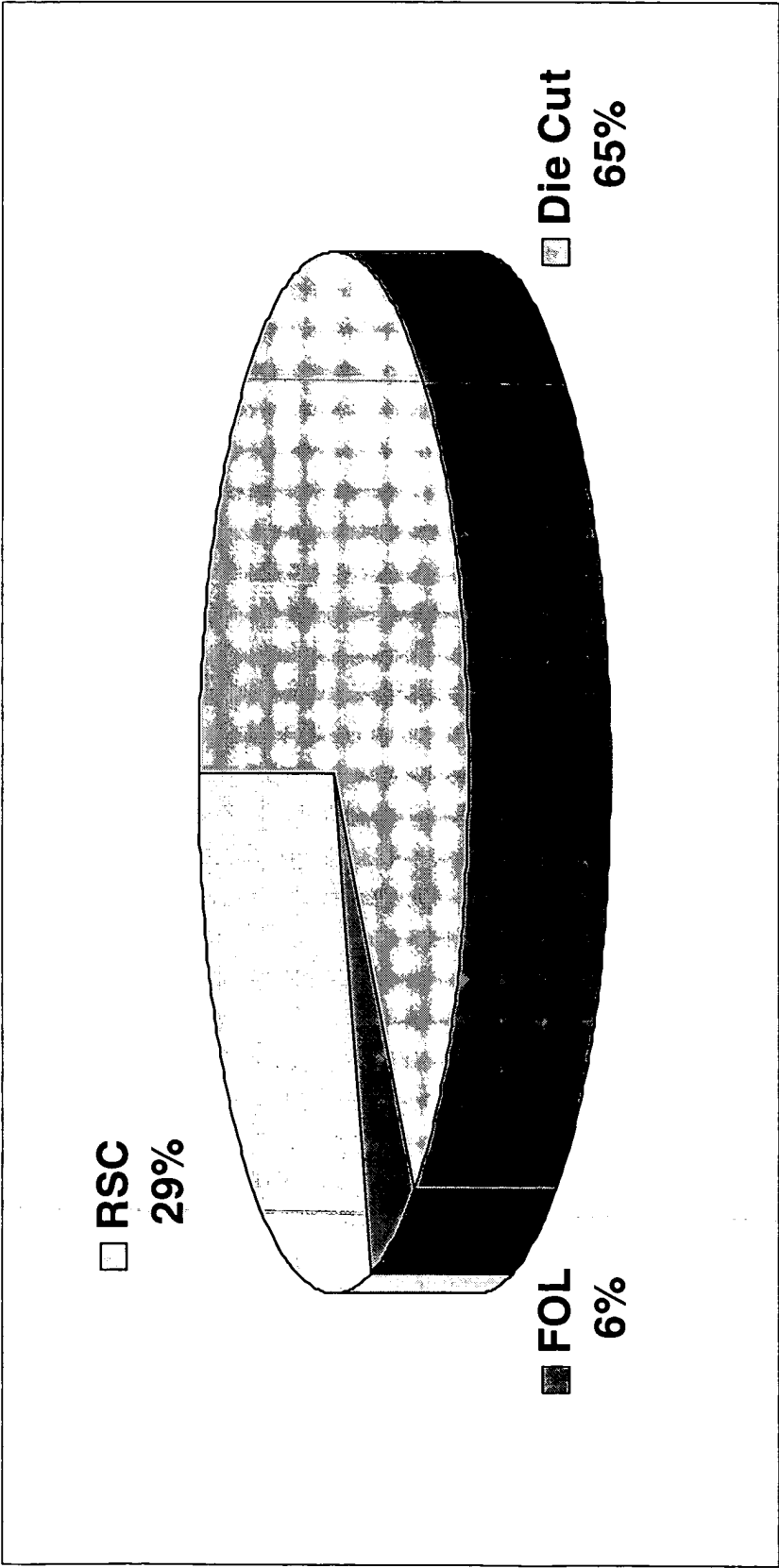


FIG. 36

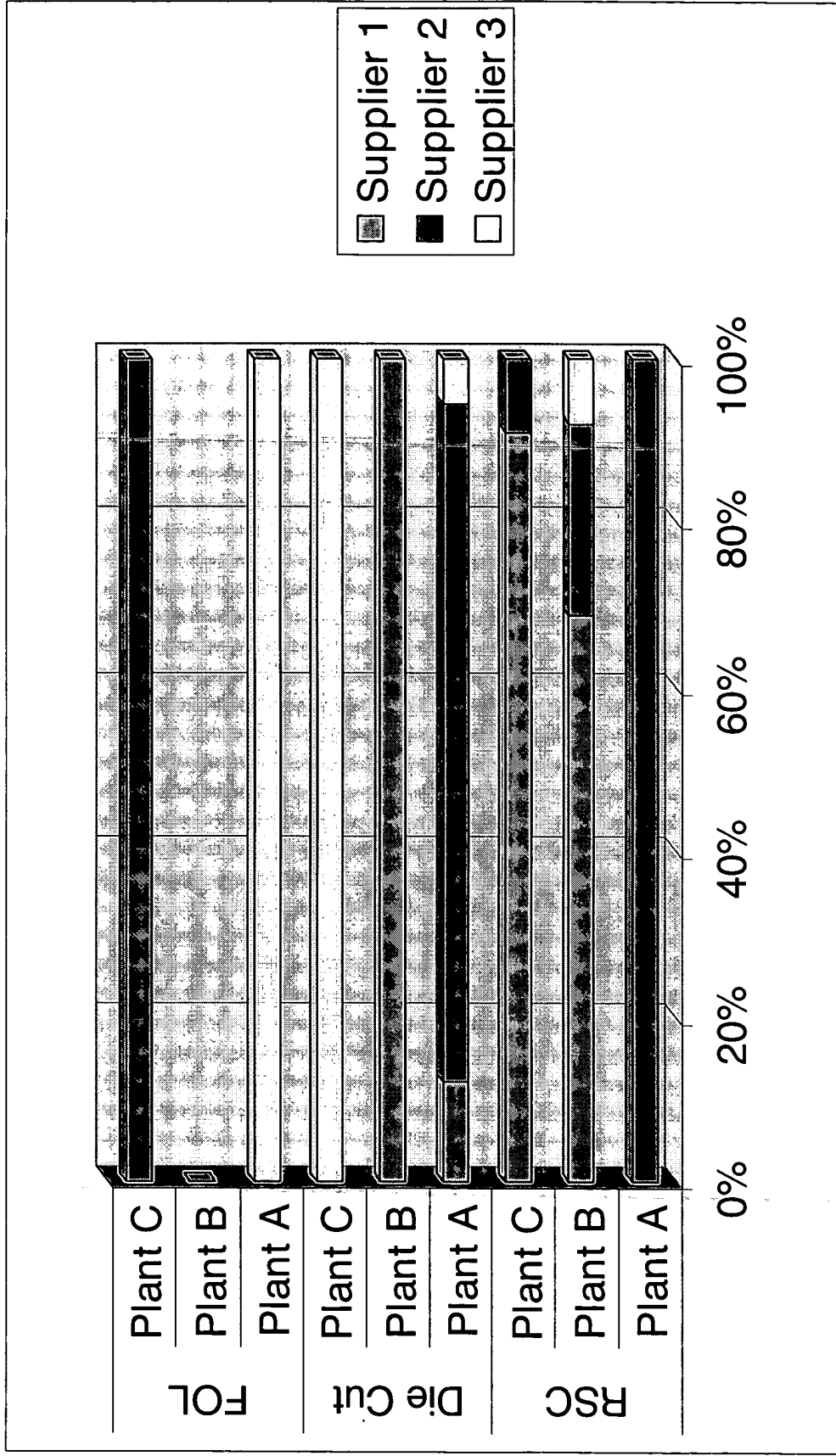


FIG. 37

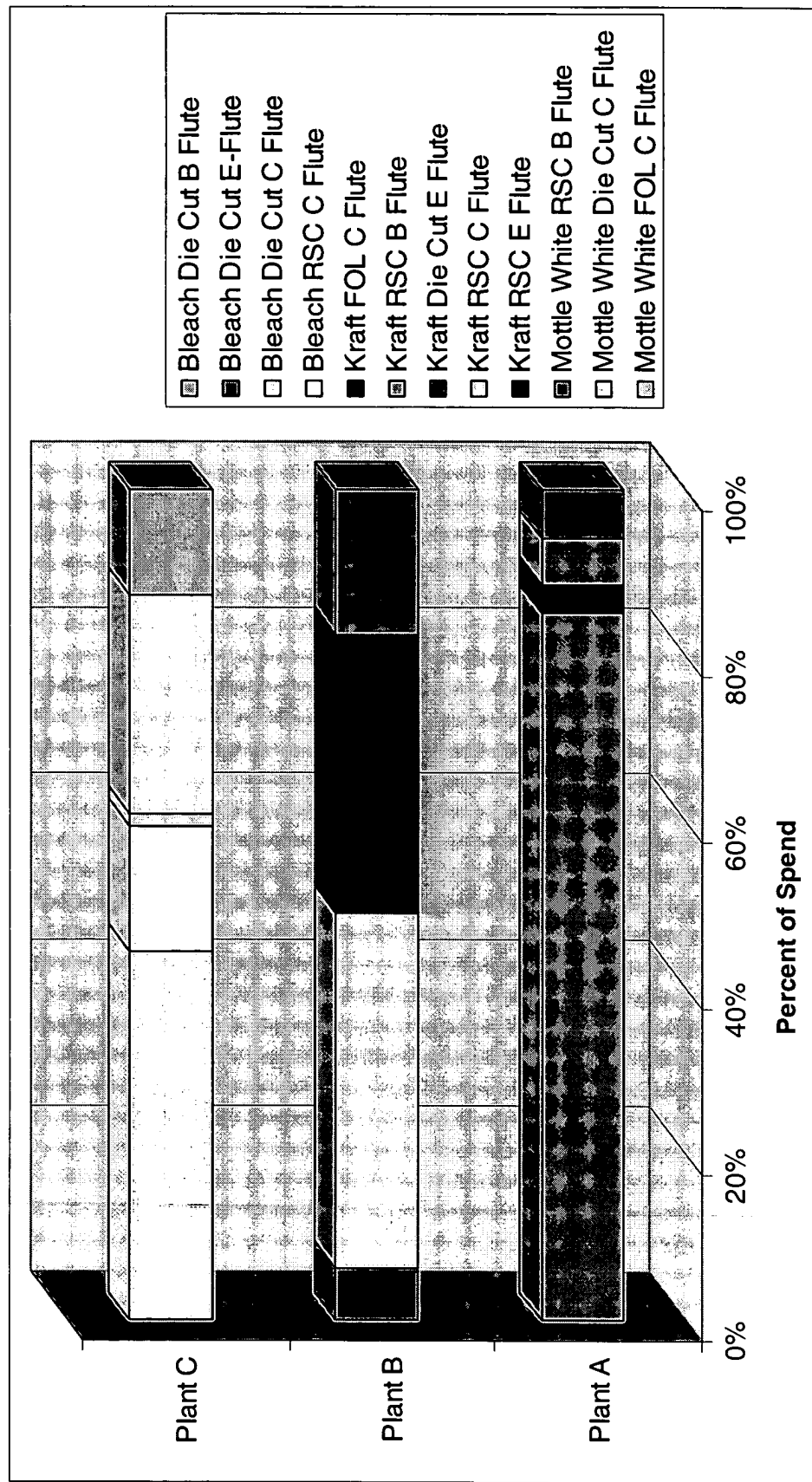


FIG. 38

TYPES OF TRANSACTIONS PER YEAR

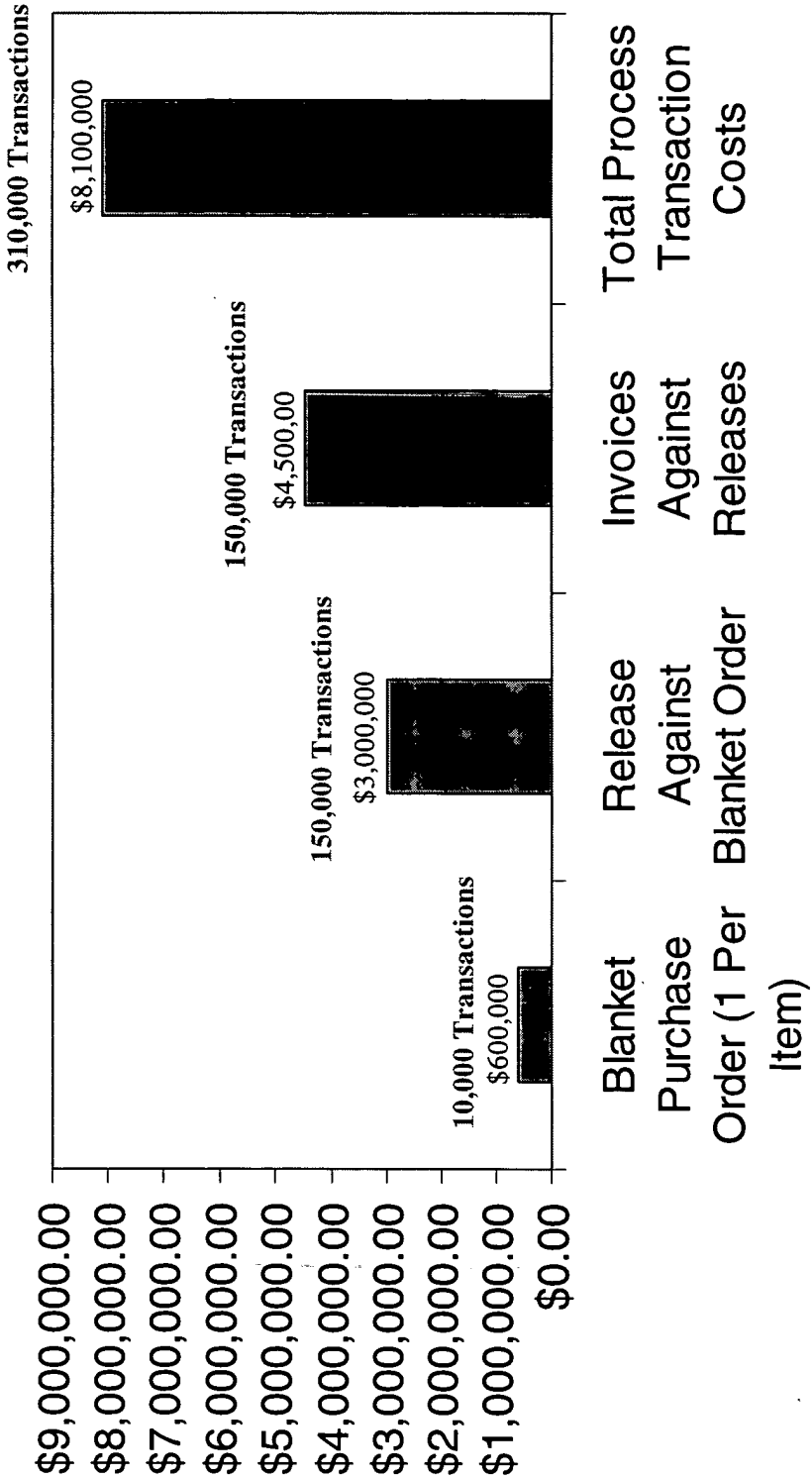


FIG. 39

280

US Shipments of Corrugated Packaging by Industry

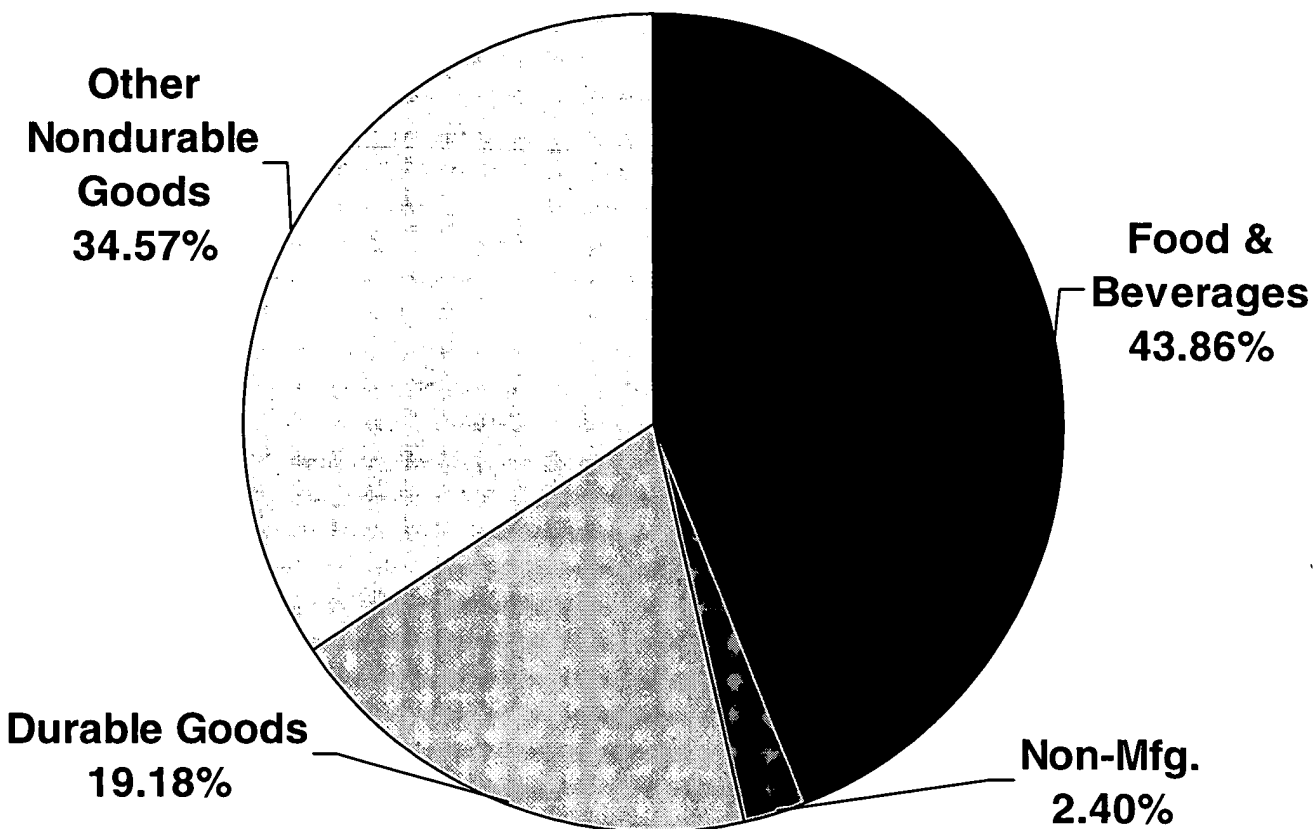


FIG. 40

282

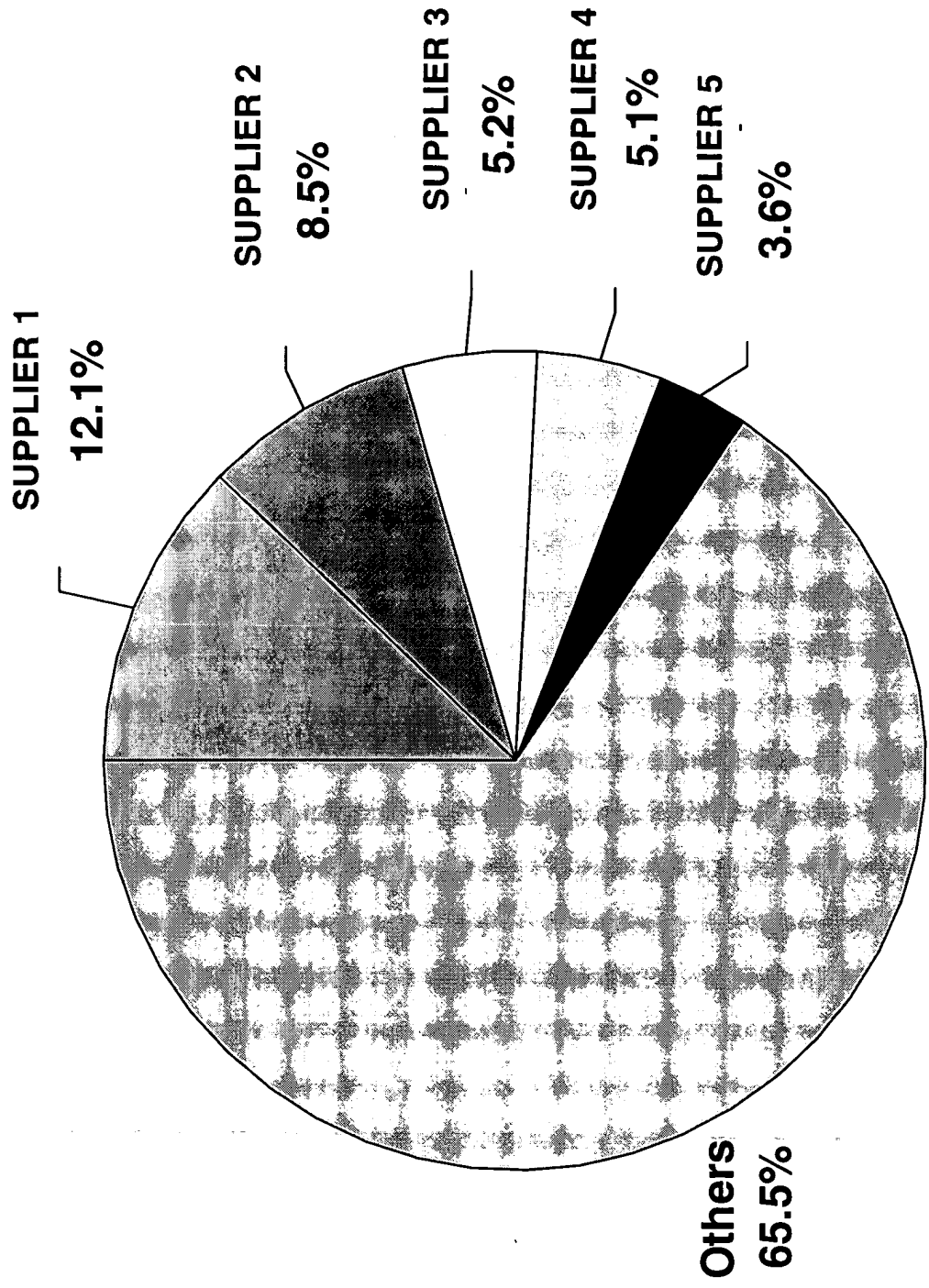


FIG. 41

Corrugated Box Shipments Forecast

284 ↗

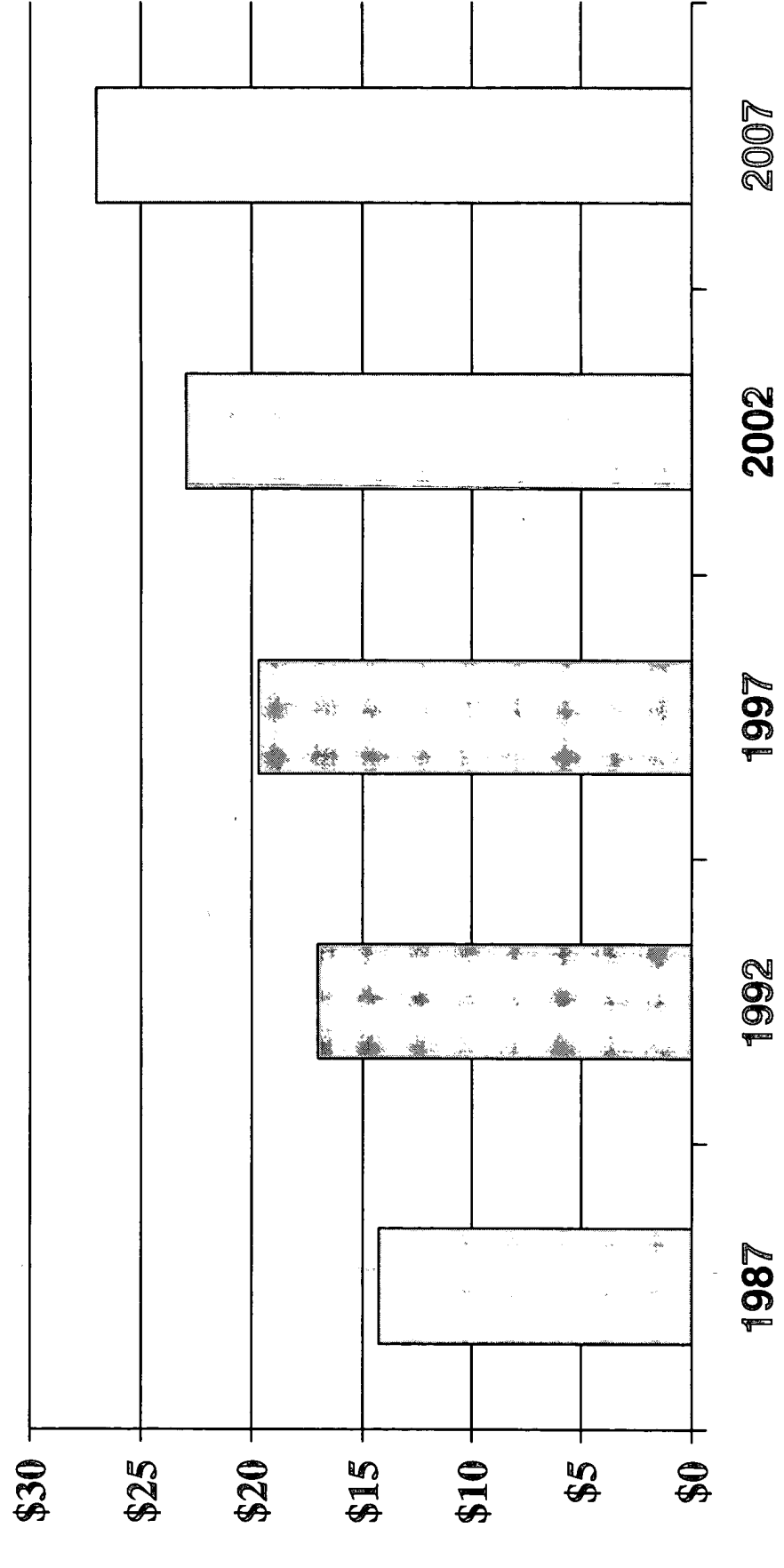


FIG. 42

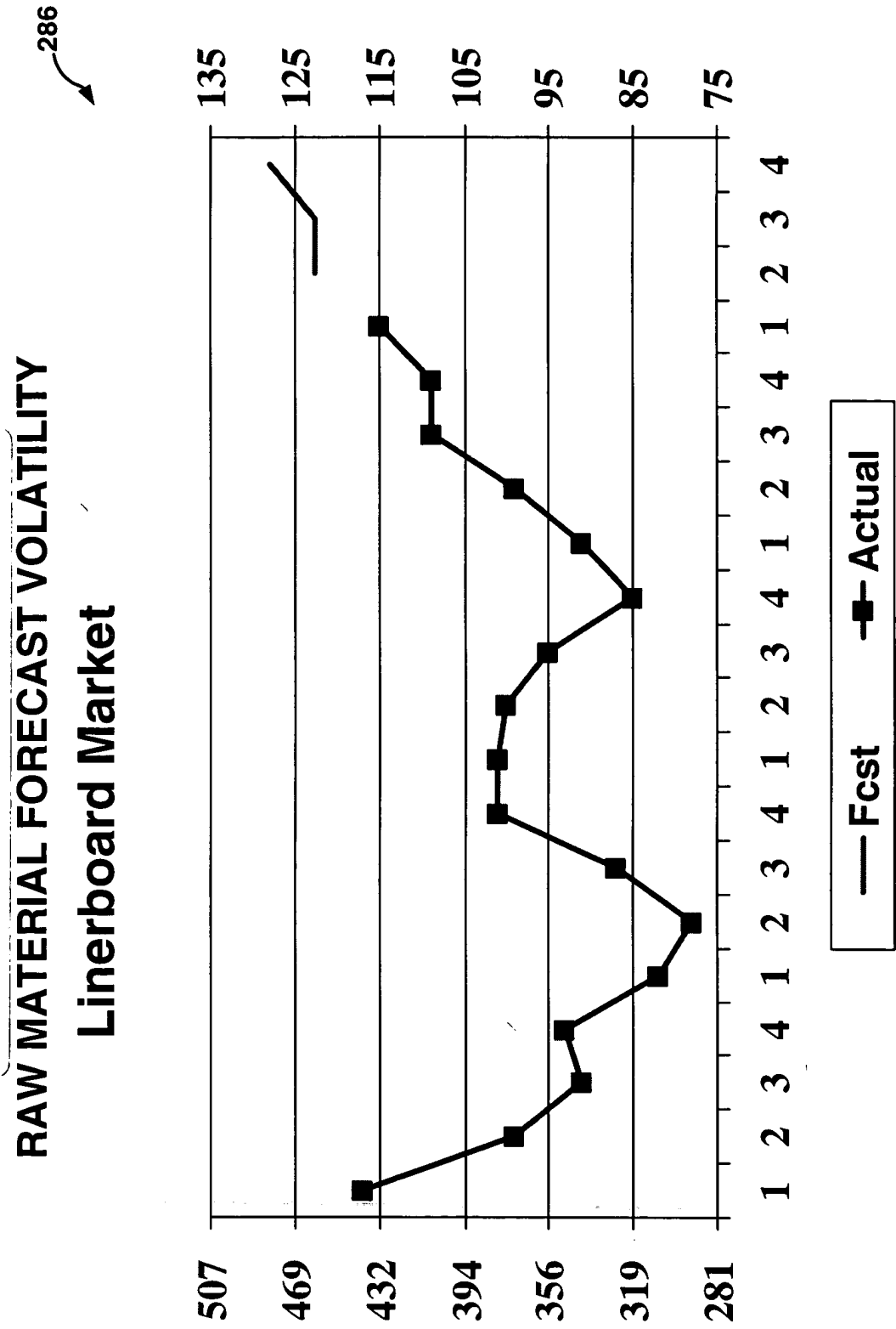


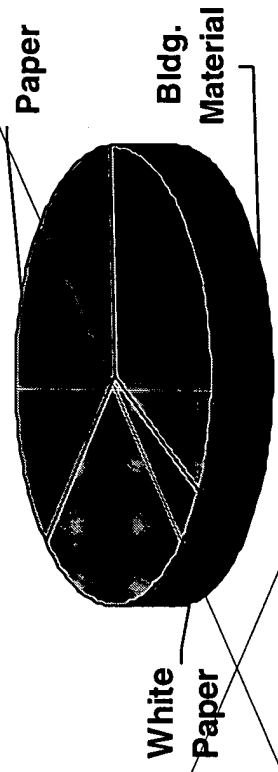
FIG. 43

Supplier A

1998 Financial Highlights

Sales Revenue	\$2,500
Net Income	\$82
Sales Growth 1 Year	5.5%
Sales Growth 5 Year	6.5%
Operating Margin	8.3%
Net Margin	2.4%
Employees	10,000

Product Segments



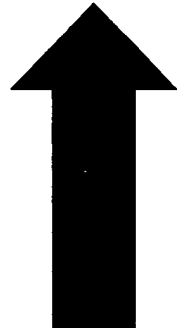
Operates 8 mills (corrugated medium, linerboard, market pulp, uncoated/coated freesheet). Total capacity of 3.3MM tons annually. 35 box and sheet plants in 20 states and Mexico. Total of 103 facilities in US, France, Mexico and Ireland. Integrated

Background - News

Known as a low-cost producer of paper. One of top 10 producers of fine paper. Kraft paper represents 5% of US production. Major converter/distributor of business forms. Top 10 US forest landowners. Purchased 11 corrugated plants in 1995

FIG. 44

Qualitative Evaluation Summary Results	
Suppliers	Points
Supplier A.	134
Supplier B	123
Supplier C.	104
Supplier D	100
Supplier E	94
Supplier F	89
Supplier G	86
Supplier H	79
Average points of all Suppliers 101.125	



- 1. Proximity & Ability to Serve 3M
- 2. Pricing & Cost Reduction
- 3. Supply Chain & Transactions
- 4. Quality & Manufacturing Capabilities
- 5. Design Capabilities
- 6. Management Support

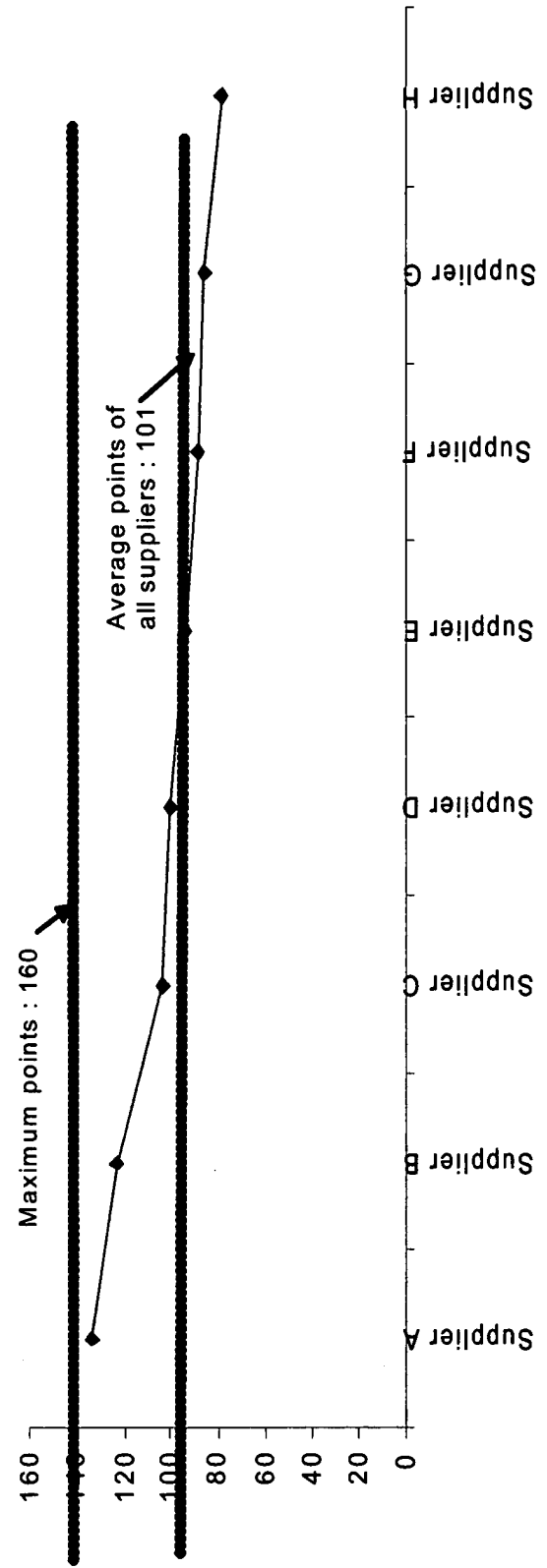


FIG. 45